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Implement&Tractor

The Business Magazine of the Farm and Industrial Equipment Industry

42nd ANNUAL STATISTICS ISSUE

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what's ahead...

I&T SINCE 1886

November 7, 1979

1985: EXPECT FIERCE COMPETITION FOR DIESEL MECHANICS. Farm equipment dealers as a whole do not have a strong track record for attracting and keeping competent service personnel, but dealers who have shown a capacity for operating profitable service departments have managed to at least hold their own. However, with the gradual move by the American automobile industry toward diesel passenger cars, the competitive pressure for diesel service personnel will have to become very intense.

Robert D. Lund, general manager of the Chevrolet Motor Div. and vice-president of General Motors, told Implement & Tractor recently that by 1985, somewhere between 20 and 25 per cent of passenger cars from Detroit will be powered by diesel engines, depending on market acceptance. Editors of Ward's Auto World publications concur. If the numbers are anywhere near accurate, somewhere between two and three million diesel engines will be going into autos each year in the 1980's, and the entire American wheel tractor industry has taken the past 15 years to turn out that many diesel-driven units.

People in diesel industries have told I&T that training institutions will be increasing their capacity to turn out diesel specialists, and it is also anticipated that competent diesel service personnel in Western Europe and elsewhere outside North America will be vigorously recruited to help fill the gap. But many of them anticipate that shortages produced by the surging demand will also be met by aggressive proselytizing among all types of dealers--automobile, truck, construction and farm equipment--as well as among independent diesel service specialists and other institutions.

U.S. FARM EQUIPMENT RETAIL SALES IN SEPTEMBER showed increases in wheel tractor and combine areas but hay tools were off from the same month in 1978, according to the Farm & Industrial Equipment Institute flash report.

Unit Retail Sales

	September			January-September		
Equipment	1979	1978	Pct. Change	1979	1978	Pct. Change
Farm Wheel Tractors						
2-wheel drive						
40-100 hp	5,285	4,928	+7.2	51,282	50,454	+1.6
Over 100 hp	4,360	4,293	+1.6	47,613	46,561	+2.3
Total 2-wheel drive	9,645	9,221	+4.6	98,895	97,015	+1.9
4-wheel drive	995	697	+42.8	7,928	6,045	+31.1
Total Tractors	10,640	9,918	+7.3	106,823	103,060	+3.7
Combines (S-P)	5,578	5,192	+7.4	20,345	19,626	+3.7
Balers*	1,816	2,036	-10.8	16,402	18,883	-13.1
Forage Harvesters**	2,237	2,321	-3.6	7,743	7,406	+4.6
Mower-Conditioners	2,290	2,590	-11.6	22,417	22,636	-1.0

*Bales under 200 lbs. **Shear-bar type

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FARM TRACTORS AND COMBINES IN USE AROUND THE WORLD

(*continued*)

Area, Nation	Number in Service — Agricultural Tractors				Combines			
	1969-71	1974	1975	1976	1969-71	1974	1975	1976
Finland	155,600	175,000	187,700	192,000	29,533	38,500	40,000	41,000
France	1,239,004	1,337,200	1,363,000	1,372,000	135,036	156,000	153,000	153,000
German D.R.	147,807	141,742	139,982	137,718	17,372	11,019	11,235	12,288
Germany, Fed.	1,368,236	1,424,949	1,441,778	1,452,661	169,769	177,900	177,900	170,900
Greece	62,160	84,043	93,424	97,000F	4,254	4,547	5,234	5,500F
Hungary	67,196	62,361	60,678	59,500	11,868	13,691	13,883	14,356
Iceland	9,881	10,100F	10,150F	10,200F	11	14F	15F	15F
Ireland	83,983	103,000*	114,217	118,000F	6,492	6,700*	6,800*	6,900*
Italy	618,732	780,602	819,334	865,715	18,530	26,912	27,774	28,766
Liechtenstein	462	433F	425	418F	.....	.....	.....	.....
Malta	142	325F	329	335F	12	10F	5	8F
Netherlands	134,098	153,700	156,529	159,000F	7,300	7,000*	6,795	6,600F
Norway	91,049	102,164	104,752	109,999	11,470	13,906	14,470	14,923
Poland	221,880	364,763	401,219	434,043	13,915	18,786	21,106	24,895
Portugal	28,511	42,024	44,452	49,660	2,505	3,654	3,815	4,113
Romania	107,793	116,816	119,533	128,024	48,247	44,211	41,077	41,602
Spain	260,578	355,554	379,070	400,928	31,769	38,335	39,674	41,218
Sweden	179,440	185,200*	189,500*	192,500*	43,633	47,900	47,800	47,700F
Switzerland	73,084	78,100	83,860	85,000F	4,456	5,300	5,026	5,000F
United Kingdom	455,886	475,796	494,738	482,871	66,005	62,000*	61,500	59,400
Yugoslavia	81,636	195,125	225,524	260,831	11,633	10,915	11,045	11,079
Oceania	429,345	434,707	434,604	434,963	69,372	64,619	63,968	63,338
Amer. Samoa	17	27F	30F	30F	.....	.....	.....	.....
Australia	329,392	332,560	332,000F	332,000F	63,549	59,483	59,000F	58,500F
Cook Islands	85	112	109	127	.....	.....	.....	.....
Fiji	1,240	1,400F	1,430F	1,450F	.....	.....	.....	.....
Fr. Polynesia	130	170F	180F	190F	.....	.....	.....	.....
Gilbert Island	9	20	14	16F	.....	.....	.....	.....

F—FAO estimate. *Unofficial figure.
Source: 1977 Production Yearbook (Vol. 31), United Nations Food & Agriculture Organization, Basic Data Unit. FAO, 00100 Rome, Italy.

(*More...*)

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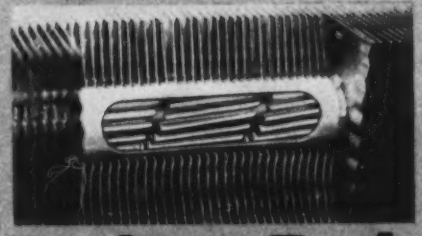

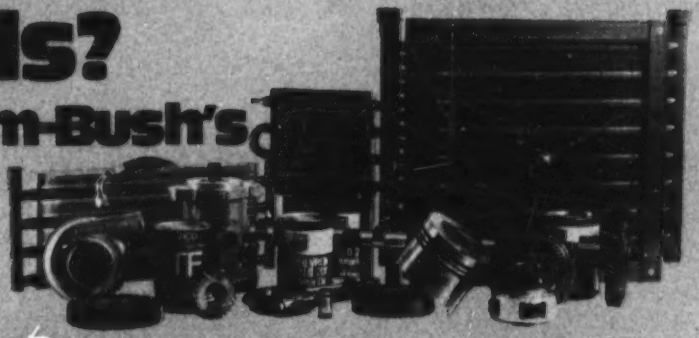

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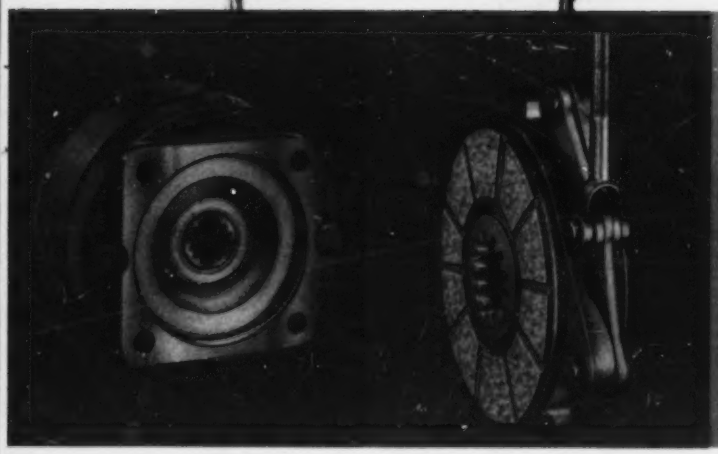

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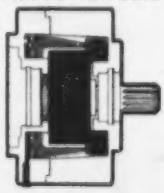

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FARM TRACTORS AND COMBINES IN USE AROUND THE WORLD

(continued)

Area, Nation	Number in Service — Agricultural Tractors 1969-71	1974	1975	1976	Combines 1969-71	1974	1975	1976
Guam	70	75F	75F	75F	.....	.....	.....	.....
New Caledonia	500	580F	603	610F	5	5F	5	5F
New Hebrides	26	48F	50F	52F	.....	.....	.....	.....
New Zealand	96,389	98,289	98,700F	99,000F	5,572	4,828	4,650F	4,500F
Niue Island	7	7F	7F	7F	.....	.....	.....	.....
Norfolk Island	8	11F	11F	11F	2	2F	2F	2F
Pacific Islands	40	47F	48F	48F	.....	.....	.....	.....
Papua, N. Guin.	1,355	1,275	1,261	1,260F	243	300F	310F	330F
Samoa	16	20	20	20	.....	.....	.....	.....
Tonga	61	66	66F	67F	1	1	1F	1F
U.S.S.R.	1,976,900	2,267,000	2,336,000	2,402,000	622,367	673,000	680,000	685,000
Developed Market Economies	11,449,952	12,448,160	12,758,235	12,892,028	1,713,849	1,954,390	2,016,584	2,076,101
N. America	5,211,768	5,202,328	5,110,840	5,014,481	919,922	840,181	817,853	808,557
W. Europe	5,363,323	6,073,448	6,287,955	6,434,537	622,753	684,696	685,061	681,519
Oceania	425,781	430,849	430,700	431,000	69,121	64,311	63,650	63,000
Other	449,081	741,535	928,740	1,012,010	102,053	365,202	450,030	523,025
Developing Market Economies	1,175,070	1,570,315	1,693,291	1,793,557	127,490	146,913	152,356	157,714
Africa	149,460	181,956	187,357	192,579	13,066	14,560	14,860	15,253
Latin America	651,557	769,882	805,137	825,832	94,746	107,489	110,931	113,865
Near East	189,740	311,580	361,633	407,006	18,209	22,931	24,559	26,515
Far East	180,473	302,734	334,954	363,868	1,218	1,625	1,688	1,743
Other	3,839	4,163	4,210	4,272	251	308	318	338
Centrally Planned Economies	2,882,663	3,382,122	3,502,118	3,617,558	742,339	791,903	800,864	811,929
Asian C.P.E.	164,922	216,850	228,950	240,450	1,853	1,920	2,320	2,220
East Europe, U.S.S.R.	2,717,741	3,165,272	3,273,168	3,377,108	740,486	789,983	798,544	809,709
Developed, All	14,167,693	15,613,432	16,031,403	16,269,136	2,454,335	2,744,373	2,815,138	2,885,810
Developing, All	1,339,992	1,787,165	1,922,241	2,034,007	129,344	148,833	154,676	159,934

F—FAO estimate. *Unofficial figure.

Source: 1977 Production Yearbook (Vol. 31), United Nations Food & Agriculture Organization, Basic Data Unit, FAO, 00100 Rome, Italy.

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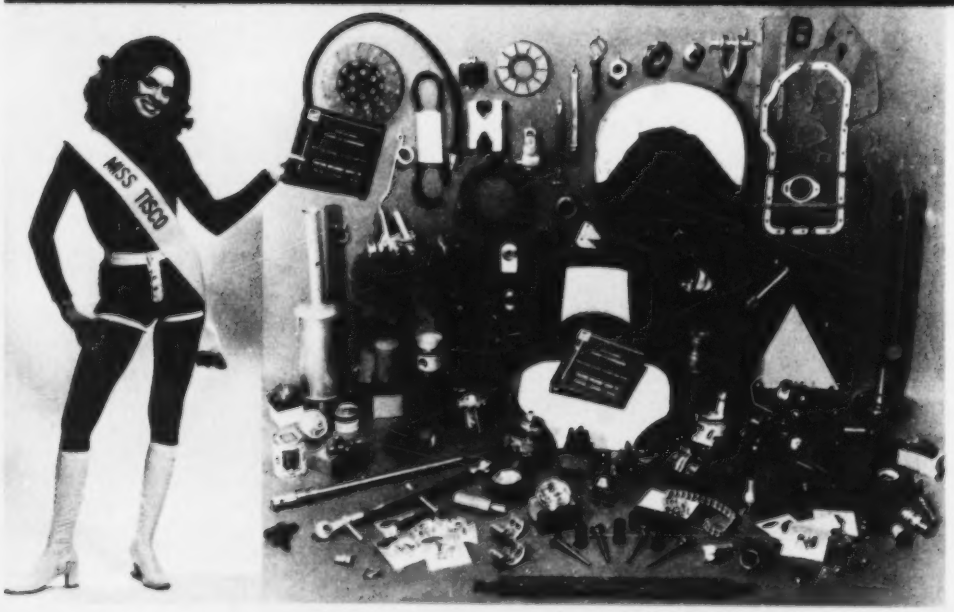

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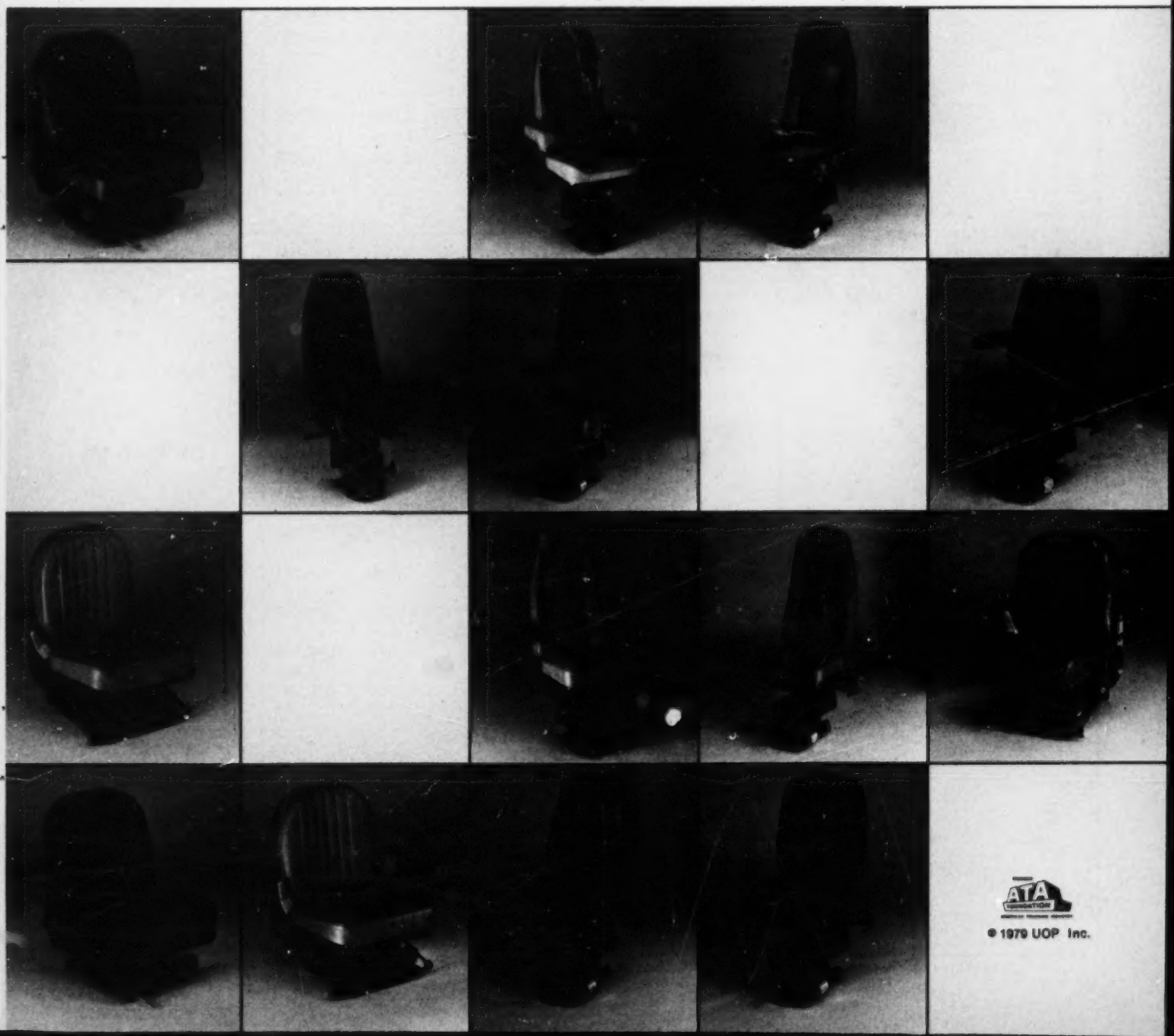

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I&T SINCE 1888 **42nd annual**

MARKET STATISTICS ISSUE

■WHEN THE I&T editorial staff falls to putting together the annual Market Statistics Issue, we find that changes are developing rapidly in at least one area of industry activity and that the numbers that pass before us are not dull or routine at all.

This year, we were fortunate enough to acquire tractor import data not only for the complete year of 1978 but also for the first half of 1979. Recalling that we had generated a lot of interest in the industry with our April 21 report, "Tractors from Japan," we first began assembling similar data for the first half of 1979 to see if the leveling out of tractor imports from Japan that had been anticipated by many industry watchers was beginning to show itself.

Not so. In 1978, 60,261 wheel tractors came in from Japan and probably about 14,000 of these (placed under "not elsewhere specified" in the tables for 1978 and 1979) were garden types. In the first half of this year, 37,152 tractors came in, and approximately 2,000 of them were garden types. The valuation on tractors from Japan in 1978 came to $150.5 million; in the first half of 1979, the figure was $112 million. Japan is now the leading seller of tractors to the U.S. in terms of both dollars and units.

In all of last year, tractor imports from West Germany came to 9,261 units valued at $83.7 million. The first half of 1979 produced imports of 7,385 tractors valued at $80 million.

Some bits of information that arrive here in statistical form are so small that we have to lump them into bland categories called "other," because our space is limited. But even these minute elements suggest the possibilities of fascinating stories. For instance, with the free world's press corps speculating over the whereabouts of Idi Amin, the overthrown African despot, we wonder if anyone thought to look in the cab of the one tractor, valued at $30,000, that was imported from Uganda. That's right, Uganda.

Other entries are also somewhat mysterious. The Commerce Dept. reports that wheel tractors came in from such places as South Korea, Hong Kong, Brazil, Norway and Hungary in the past 18 months, but we've seen no trace of them.

One important caution: Import data should be read with a sense of tolerance. The person responsible for classifying and reporting them at the port of entry may have difficulty in recognizing some items for what they are, and thus drop them in the wrong slot. For instance, everybody knows that Japan doesn't make farm wheel tractors over 100 horsepower, but 455 units were thus classified that way in 1978 and 347 in the first half of 1979. The valuations average out at around $3,000 per unit, so they obviously belong in a smaller bracket.

Looking at all types of farm equipment imports, we see that Canada is still the biggest seller to the U.S. ($408 million in the first half of 1979), followed by Japan ($132 million), West Germany ($122 million) and the United Kingdom ($106 million). □

FARM TRACTORS AND COMBINES IN USE AROUND THE WORLD

Area, Nation	Number in Service: Agricultural Tractors 1969-71	1974	1975	1976	Combines 1969-71	1974	1975	1976
World	15,507,685	17,400,597	17,953,644	18,303,143	2,583,679	2,893,206	2,969,814	3,045,744
Africa	330,455	387,445	407,907	415,929	34,506	37,901	39,160	40,653
Algeria	47,172	50,000F	51,000F	52,000F	6,000	6,900F	7,000F	7,100F
Angola	7,207	9,000F	9,300F	9,500F	.....	.....	.....	.....
Benin	78	86F	88F	92F	.....	.....	.....	.....
Botswana	1,598	1,800F	1,850F	1,900F	45	55F	58F	60F
Burundi	4	5	5F	7F	.....	.....	.....	.....
Cameroon	150	250F	280F	300F	.....	.....	.....	.....
Cape Verde	21	27F	30F	30F	.....	.....	.....	.....
Cent. Afr. Emp.	69	110F	120F	130F	3	7F	8F	8F
Chad	93	125F	130F	140F	8	14F	15F	15F
Congo	619	647	650F	655F	27	50F	55F	57F
Djibouti	36	44F	45F	47F	.....	.....	.....	.....
Egypt	17,276	20,889	21,500F	22,000F	1,700	1,880F	1,900F	1,950F
Eq. Guinea	70	90F	95F	95F	.....	.....	.....	.....
Ethiopia	2,858	3,500F	3,600F	3,700F	77	125F	130F	135F
Gabon	750	950F	1,000F	1,050F	.....	.....	.....	.....
Gambia	61	67F	68F	70F	2	3F	3F	3F
Ghana	2,683	3,100F	3,200F	3,250F	30	150	180F	200F
Guinea	53	65F	68F	70F	.....	.....	.....	.....
Guin. Bissau	18	23F	23F	24F	.....	.....	.....	.....
Ivory Coast	1,381	2,000F	2,200F	2,300F	10	13F	15F	16F
Kenya	6,379	6,195	5,993	6,000F	658	462	431	440F
Lesotho	410	950F	980F	1,000F	3	20F	20F	25F
Liberia	175	235F	250F	260F	.....	.....	.....	.....
Libya	3,633	4,100F	4,250F	4,350F	.....	.....	.....	.....
Madagascar	2,358	2,300F	2,350F	2,400F	79	98F	100F	105F
Malawi	843	950F	970F	1,000F	.....	.....	.....	.....
Mali	363	530F	560F	600F	27	34F	35F	37F
Mauritius	284	295F	300F	305F	.....	.....	.....	.....
Morocco	12,279	18,477	20,000F	21,500F	2,500	2,624	2,700F	2,800F
Mozambique	4,198	5,400F	5,500F	5,550F	.....	.....	.....	.....
Namibia	2,050	2,250F	2,300F	2,350F	.....	.....	.....	.....
Niger	35	65	68	70F	.....	.....	.....	.....
Nigeria	2,933	7,300F	7,500F	7,700F	.....	.....	.....	.....
Reunion	269	319	325	325	.....	.....	.....	.....
Rhodesia	17,000	18,700F	19,000F	19,300F	327	440F	480F	500F
Rwanda	64	84	80F	80	.....	.....	.....	.....
Sao Tome, Etc	114	120F	120F	122F	.....	.....	.....	.....
Senegal	297	360F	370F	380F	90	100F	110F	120F
Seychelles	18	30	30F	30F	.....	.....	.....	.....
Sierra Leone	222	240F	250F	255F	14	20F	20F	22F
Somalia	910	1,220	1,270F	1,300F	.....	.....	.....	.....
South Africa	155,042	172,000	186,000	188,000	19,400	20,611	21,500	22,500F
Sudan	5,043	8,500F	8,800F	9,000F	340	850F	900F	950F
Swaziland	1,211	1,946	1,935	1,950F	.....	.....	.....	.....
Tanzania	5,593	7,000F	7,200F	7,400F	.....	.....	.....	.....
Togo	62	100F	110F	120F	.....	.....	.....	.....
Tunisia	21,000	28,000F	29,000F	30,000F	2,633	3,200F	3,250F	3,350F
Uganda	1,283	1,743	1,731	1,656	7	9	9	9
Upper Volta	40	50F	52F	55F	.....	.....	.....	.....
Western Sahara	8	8	11	11F	1	1	1F	1F
Zaire	1,048	1,200F	1,250F	1,300F	.....	.....	.....	.....
Zambia	3,093	4,000F	4,100F	4,200F	177	235F	240F	250F
North and Central America	5,408,629	5,426,672	5,343,434	5,246,875	935,219	858,621	836,985	828,341
Antigua	133	238	226	228	.....	.....	.....	.....
Bahamas	30	50F	60F	65F	.....	.....	.....	.....
Barbados	415	460F	480F	500F	.....	.....	.....	.....
Belize	205	250F	265F	270F	12	18F	20F	22F

F—FAO estimate. *Unofficial figure.

Source: 1977 Production Yearbook (Vol. 31), United Nations Food & Agriculture Organization, Basic Data Unit, FAO, 00100 Rome, Italy.

(More...)

FARM TRACTORS AND COMBINES IN USE AROUND THE WORLD

(continued)

Area, Nation	Number in Service: Agricultural Tractors 1969-71	1974	1975	1976	Combines 1969-71	1974	1975	1976
Bermuda	51	40F	36F	34	.....	.....	.....	.....
Canada	596,435	617,328	625,840	634,481	161,588	162,181	162,853	163,557
Costa Rica	5,100	5,500F	5,650F	5,700F	777	880F	900F	920F
Cuba	51,767	52,687	54,851	49,000	2,400	2,600F	2,650F	2,700F
Dominica	65	85F	87F	88F	.....	.....	.....	.....
Dominican Rep.	4,233	5,500F	5,700F	5,800F	.....	.....	.....	.....
El Salvador	2,514	2,850F	2,900F	3,000F	218	250F	260F	270F
Greenland	223	265F	270F	275F	.....	.....	.....	.....
Grenada	22	22	22F	22F	.....	.....	.....	.....
Guadeloupe	517	600	660	750	.....	.....	.....	.....
Guatemala	3,167	3,600F	3,700F	3,750F	1,550	2,250F	2,350F	2,400F
Haiti	363	420F	440F	450F	.....	.....	.....	.....
Honduras	633	950F	1,000F	1,050F	.....	.....	.....	.....
Jamaica	1,722	2,300F	2,500F	2,600F	.....	.....	.....	.....
Martinique	363	760	8[illegible]	840	.....	.....	.....	.....
Mexico	114,410	135,000F	140,000F	145,000F	10,016	12,000F	12,500F	13,000F
Montserrat	20	18	17	12	.....	.....	.....	.....
Neth. Antilles	112	120F	120F	122F	.....	.....	.....	.....
Nicaragua	500	768	1,058	1,316	.....	.....	.....	.....
Panama	2,414	3,500F	3,700F	3,800F	322	440F	450F	470F
Puerto Rico	5,385	5,603	5,249	4,886	.....	.....	.....	.....
St. Kitts, Etc.	191	208F	210F	210F	.....	.....	.....	.....
St. Lucia	40	36F	37F	37F	.....	.....	.....	.....
St. Vincent	57	81	71	75F	.....	.....	.....	.....
Trinidad, Etc.	1,850	2,050F	2,100F	2,150F	.....	.....	.....	.....
U.S.A.	4,615,333	4,585,000	4,485,000	4,380,000	758,333	678,000	655,000	645,000
Virgin Islands U.K.	3	4F	4F	4F	.....	.....	.....	.....
Virgin Islands U.S.A.	356	379	366	360	2	2	2	2
South America	454,971	545,843	572,849	593,747	79,448	89,049	91,799	94,081
Argentina	171,450	184,000F	188,000F	190,000F	34,884	39,000F	40,000F	41,000F
Bolivia	355	720F	750F	760F	143	200F	210F	220F
Brazil	168,257	236,000F	254,000	270,000F	26,000	30,000F	31,000F	32,000F
Chile	25,500	27,500F	28,000F	28,500F	9,600	10,400F	10,600F	10,700F
Colombia	22,894	23,753	24,187	24,621	1,400	1,600F	1,650F	1,700F
Ecuador	2,833	3,400F	3,550F	3,700F	400	520F	550F	570F
Falkland Island	95	112	112	114F	.....	.....	.....	.....
Fr. Guiana	35	48F	50F	52F	2	2F	2F	2F
Guyana	3,650	3,700F	3,720F	3,750F	405	420F	425F	425F
Paraguay	2,200	2,600F	2,700F	2,800F	.....	.....	.....	.....
Peru	10,902	12,000F	12,500F	12,700F	.....	.....	.....	.....
Surinam	940	1,150F	1,180F	1,200F	109	110F	112F	114F
Uruguay	26,659	27,400F	27,500F	27,550F	5,204	5,300F	5,350F	5,350F
Venezuela	19,200	23,460	26,600*	28,000F	1,300	1,497	1,900*	2,000F
Asia	803,221	1,367,210	1,633,727	1,799,984	101,894	368,337	454,297	528,103
Afghanistan	567	650F	700F	700F	.....	.....	.....	.....
Bangladesh	1,887	3,100F	3,500F	3,700F	.....	.....	.....	.....
Brunei	10	15F	18F	20F	1	2F	2F	2F
Burma	5,116	7,661	7,800F	8,000F	12	18F	20F	20F
China	135,000F	180,000F	190,000F	200,000F	.....	.....	.....	.....
Cyprus	6,810	9,500F	9,800F	10,000F	351	280	300F	320F
East Timor	86	110F	111F	113F	.....	.....	.....	.....
Hong Kong	2	6	6	6F	.....	.....	.....	.....
India	111,000	203,351	227,668	250,884	760	869	879	879
Indonesia	8,500	10,000F	10,500F	10,800F	.....	.....	.....	.....
Iran	20,167	27,000F	29,000F	30,000F	1,650	2,050F	2,150F	2,200F
Iraq	13,667	19,000F	20,222*	21,000F	3,883	4,800F	5,084*	5,200F
Israel	15,982	19,535	21,650	24,010	593	505	520	525
Japan	278,057	550,000F	721,090	800,000F	82,060	344,086	428,010	500,000F
Jordan	2,759	3,547	3,748	3,914	139	180F	190F	200F
Kampuchea	1,255	1,350F	1,350F	1,350F	20	20F	20F	20F
Korea Dpr.	19,667	24,000F	25,000F	26,000F	.....	.....	.....	.....

F—FAO estimate. *Unofficial figure.

Source: 1977 Production Yearbook (Vol. 31), United Nations Food & Agriculture Organization, Basic Data Unit, FAO, 00100 Rome, Italy.

(More...)

November 7, 1979

FARM TRACTORS AND COMBINES IN USE AROUND THE WORLD

Area, Nation	Number in Service: Agricultural Tractors 1969-71	1974	1975	1976	Combines 1969-71	1974	1975	1976
Korea Rep.	115	388	564	790	10	53	56	69
Kuwait	8	18	14	16F	.....	.....	.....	.....
Laos	339	360F	380F	400F	.....	.....	.....	.....
Lebanon	2,517	3,000F	3,000F	3,000F	60	90F	90F	90F
Mal. Peninsula	4,100	6,000F	6,300F	6,500F	.....	.....	.....	.....
Mal. Sabah	410	500F	520F	530F	.....	.....	.....	.....
Mal. Sarawak	35	60F	80F	90F	.....	.....	.....	.....
Mongolia	5,433	7,200	8,100	8,500	1,833	1,900	2,300	2,200
Nepal	358	430F	450F	460F	.....	.....	.....	.....
Pakistan	21,303	33,000F	35,714	37,000F	203	350F	378	400F
Philippines	5,633	6,200F	6,300F	6,500F	230	330F	350F	370F
Saudi Arabia	617	770F	800F	830F	160	250F	280F	300F
Singapore	37	60F	70F	75F	.....	.....	.....	.....
Sri Lanka	13,492	15,500F	15,800F	16,000F	2	3	3	3
Syria	9,131	12,864	15,303	18,567	1,410	1,744	1,812	2,146
Thailand	8,049	15,993	19,173	22,000F	.....	.....	.....	.....
Turkey	105,996	199,812	242,456	281,479	8,510	10,796	11,841	13,147
Viet Nam	3,567	4,300F	4,500F	4,600F	.....	.....	.....	.....
Yemen, A.R.	500	750F	850F	950F	.....	.....	.....	.....
Yemen, Dem.	1,050	1,180F	1,190F	1,200F	6	11F	12F	12F
Europe	6,104,164	6,971,720	7,225,123	7,409,645	740,873	801,679	803,605	806,228
Albania	6,200	8,700F	9,000F	9,200F	853	980F	1,000F	1,050F
Austria	249,050	284,414	290,000	294,000	28,247	30,693	30,500	30,200
Belgium-Lux.	97,960	103,059	104,173	108,801	9,938	10,158	9,408	10,778
Bulgaria	53,964	62,000F	64,700	65,500	9,412	9,583	10,340	10,500
Czechoslovakia	136,000	141,890	142,056	141,123	16,452	15,713	19,903	20,018
Denmark	173,831	182,660	185,000*	182,618	42,160	44,252	44,300F	44,419

F—FAO estimate. *Unofficial figure.
Source: 1977 Production Yearbook (Vol. 31), United Nations Food & Agriculture Organization, Basic Data Unit, FAO, 00100 Rome, Italy.

(*More...*)

LR-900
Used as directed, the LR-900 will act as an engine protectant, by monitoring oil levels and adding oil when needed automatically!
CAUTION: Extensive use of Murphy Products may be habit forming.

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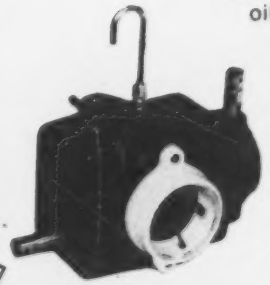
HEADACHE RELIEF
for Engine Operators

Murphy laboratories developed the LR-900 to provide fast relief for headache pain caused by daily oil check ups and mechanical failure resulting from insufficient crankcase levels. When set at the factory recommended oil level height, the **MURPHYMATIC®** LR-900 monitors crankcase lube oil level and automatically adds the proper amount prescribed by the engine manufacturer.

If something should go wrong, such as loss of oil supply, the LR-900 shuts down the engine and/or actuates an alarm.

MURPHYMATIC® LR-900 is safe to use on larger engines, too! A 1/4 inch inlet port allows for rapid refilling after an oil change. One gallon of 40-weight oil can be metered in six minutes due to the new "thumb valve metering design".

Take **MURPHYMATIC®** LR-900 and stop worrying about engine lube oil levels.



Use only as directed and remember to follow installation instructions. If severe engine problems persist, consult your engine specialist.

Also available in explosion proof model (LR-900 EX). Write or call for complete information on the LR-900.

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FARM TRACTORS AND COMBINES IN USE AROUND THE WORLD

(continued)

Area, Nation	Number in Service — Agricultural Tractors — 1969-71	1974	1975	1976	Combines — 1969-71	1974	1975	1976
Finland	155,600	175,000	187,700	192,000	29,533	38,500	40,000	41,000
France	1,239,004	1,337,200	1,363,000	1,372,000	135,036	156,000	153,000	153,000
German D.R.	147,807	141,742	139,982	137,718	17,372	11,019	11,235	12,288
Germany, Fed.	1,368,236	1,424,949	1,441,778	1,452,661	169,769	177,900	177,900	170,900
Greece	62,160	84,043	93,424	97,000F	4,254	4,547	5,234	5,500F
Hungary	67,196	62,361	60,678	59,500	11,868	13,691	13,883	14,356
Iceland	9,881	10,100F	10,150F	10,200F	11	14F	15F	15F
Ireland	83,983	103,000*	114,217	118,000F	6,492	6,700*	6,800*	6,900*
Italy	618,732	780,602	819,334	865,715	18,530	26,912	27,774	28,766
Liechtenstein	462	433F	425	418F	.....	.....	.....	.....
Malta	142	325F	329	335F	12	10F	5	8F
Netherlands	134,098	153,700	156,529	159,000F	7,300	7,000*	6,795	6,600F
Norway	91,049	102,164	104,752	109,999	11,470	13,906	14,470	14,923
Poland	221,880	364,763	401,219	434,043	13,915	18,786	21,106	24,895
Portugal	28,511	42,024	44,452	49,660	2,505	3,654	3,815	4,113
Romania	107,793	116,816	119,533	128,024	48,247	44,211	41,077	41,602
Spain	260,578	355,554	379,070	400,928	31,769	38,335	39,674	41,218
Sweden	179,440	185,200*	189,500*	192,500*	43,633	47,900	47,800	47,700F
Switzerland	73,084	78,100	83,860	85,000F	4,456	5,300	5,026	5,000F
United Kingdom	455,886	475,796	494,738	482,871	66,005	62,000*	61,500	59,400
Yugoslavia	81,636	195,125	225,524	260,831	11,633	10,915	11,045	11,079
Oceania	429,345	434,707	434,604	434,963	69,372	64,619	63,968	63,338
Amer. Samoa	17	27F	30F	30F	.....	.....	.....	.....
Australia	329,392	332,560	332,000F	332,000F	63,549	59,483	59,000F	58,500F
Cook Islands	85	112	109	127	.....	.....	.....	.....
Fiji	1,240	1,400F	1,430F	1,450F	.....	.....	.....	.....
Fr. Polynesia	130	170F	180F	190F	.....	.....	.....	.....
Gilbert Island	9	20	14	16F	.....	.....	.....	.....

F—FAO estimate. *Unofficial figure.

Source: 1977 Production Yearbook (Vol. 31), United Nations Food & Agriculture Organization, Basic Data Unit. FAO, 00100 Rome, Italy.

(More...)

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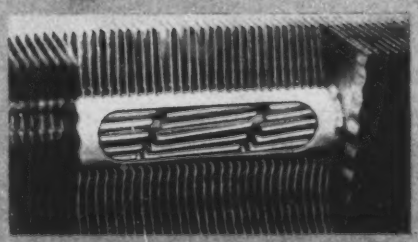

Fact: Reduce oil or hydraulic fluid operating temperature 20°F and you double the life of the oil. Cooler oil also produces a corresponding increase in the service life of every lubricated or hydraulically driven component, including valves, bearings, pumps and transmissions.

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FARM TRACTORS AND COMBINES IN USE AROUND THE WORLD

(continued)

Area, Nation	Number in Service — Agricultural Tractors				Combines			
	1969-71	1974	1975	1976	1969-71	1974	1975	1976
Guam	70	75F	75F	75F	.....	.....	.....	.....
New Caledonia	500	580F	603	610F	5	5F	5	5F
New Hebrides	26	48F	50F	52F	.....	.....	.....	.....
New Zealand	96,389	98,289	98,700F	99,000F	5,572	4,828	4,650F	4,500F
Niue Island	7	7F	7F	7F	.....	.....	.....	.....
Norfolk Island	8	11F	11F	11F	2	2F	2F	2F
Pacific Islands	40	47F	48F	48F	.....	.....	.....	.....
Papua, N. Guin.	1,355	1,275	1,261	1,260F	243	300F	310F	330F
Samoa	16	20	20	20	.....	.....	.....	.....
Tonga	61	66	66F	67F	1	1	1F	1F
U.S.S.R.	1,976,900	2,267,000	2,336,000	2,402,000	622,367	673,000	680,000	685,000
Developed Market Economies	11,449,952	12,448,160	12,758,235	12,892,028	1,713,849	1,954,390	2,016,594	2,076,101
N. America	5,211,768	5,202,328	5,110,840	5,014,481	919,922	840,181	817,853	808,557
W. Europe	5,363,323	6,073,448	6,287,955	6,434,537	622,753	684,696	685,061	681,519
Oceania	425,781	430,849	430,700	431,000	69,121	64,311	63,650	63,000
Other	449,081	741,535	928,740	1,012,010	102,053	365,202	450,030	523,025
Developing Market Economies	1,175,070	1,570,315	1,693,291	1,793,557	127,490	146,913	152,356	157,714
Africa	149,460	181,956	187,357	192,579	13,066	14,560	14,860	15,253
Latin America	651,557	769,882	805,137	825,832	94,746	107,489	110,931	113,865
Near East	189,740	311,580	361,633	407,006	18,209	22,931	24,559	26,515
Far East	180,473	302,734	334,954	363,868	1,218	1,625	1,688	1,743
Other	3,839	4,163	4,210	4,272	251	308	318	338
Centrally Planned Economies	2,882,663	3,382,122	3,502,118	3,617,558	742,339	791,903	800,864	811,929
Asian C.P.E.	164,922	216,850	228,950	240,450	1,853	1,920	2,320	2,220
East Europe, U.S.S.R.	2,717,741	3,165,272	3,273,168	3,377,108	740,486	789,983	798,544	809,709
Developed, All	14,167,693	15,613,432	16,031,403	16,269,136	2,454,335	2,744,373	2,815,138	2,885,810
Developing, All	1,339,992	1,787,165	1,922,241	2,034,007	129,344	148,833	154,676	159,934

F—FAO estimate. *Unofficial figure.

Source: 1977 Production Yearbook (Vol. 31), United Nations Food & Agriculture Organization, Basic Data Unit, FAO, 00100 Rome, Italy.

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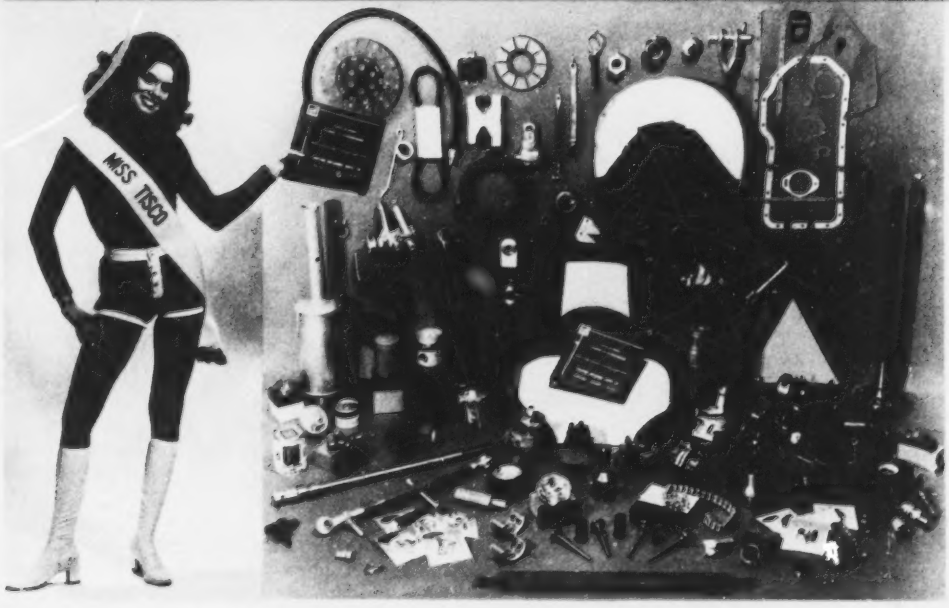

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FARM EQUIPMENT EXPORTS BY TYPE OF PRODUCT 1976-1977

Product	Jan.-Dec., 1976 Unit Quantity	Jan.-Dec., 1976 Dollar Value in Thousands	Jan.-Dec., 1977 Unit Quantity	Jan.-Dec., 1977 Dollar Value in Thousands
Planters & Transplanters	8,076	10,207	6,036	9,868
Drills & Seeders	25,090	12,162	10,821	15,554
Fertilizing Machines	85,576	22,452	12,464	20,803
Planters/Transplanters, P&A	.....	16,905	.....	15,418
Moldboard Plows	26,776	10,484	3,197	7,487
Disk Plows	26,657	20,889	12,484	20,549
Plows & Listers, NEC	24,847	6,075	4,127	4,672
Disk Harrows (excl. Plows)	9,544	13,644	4,655	13,172
Harrows, NEC, Soil Pulverizers, etc.	77,711	14,402	14,770	11,865
Cultivators, tractor-drawn or mounted	44,608	15,343	6,686	16,268
Cultivators, NEC, and Weeders	32,861	4,519	14,411	5,156
P&A for Plows, etc.	.....	36,945	.....	31,074
Combines, pull-type	2,334	21,373	2,079	23,045
Combines, self-propelled	4,977	68,309	4,627	66,224
Field Forage Harvesters	14,936	25,083	3,502	23,531
Harvesting Machines, NEC	18,215	64,470	10,675	71,285
P&A for Harvesting Mach.	.....	49,958	.....	48,861
Mowers, Cutterbar, tractor-drawn	5,599	3,468	5,067	3,650
Hay Rakes & Tedders	2,530	1,914	2,558	2,208
Pickup Hay Balers	12,821	37,459	10,208	33,417
Mowers, Rotary, tractor-drawn (excl. lawn mowers)	2,352	2,566	2,045	2,501
Haying Machines, NEC, & Mowers, NEC	3,149	7,735	2,603	7,650
P&A for Haying Machinery	.....	18,094	.....	22,445
Wheel Tractors, NEC, 9-34 PTO HP	8,464	13,918	11,160	15,150
Wheel Tractors, NEC, 35-39 PTO HP	3,112	14,568	2,314	13,716
Wheel Tractors, NEC, 40-49 PTO HP	420	2,466	460	3,491
Wheel Tractors, NEC, 50-59 PTO HP	1,846	16,180	1,435	14,108
Wheel Tractors, NEC, 60-69 PTO HP	3,585	36,593	3,113	35,223
Wheel Tractors, NEC, 70-79 PTO HP	1,136	13,641	1,021	13,005
Wheel Tractors, NEC, 80-89 PTO HP	1,917	23,959	1,598	22,854
Wheel Tractors, NEC, 90-99 PTO HP	2,946	34,581	1,679	21,019
Wheel Tractors, NEC, 100 HP plus	22,070	371,487	15,312	296,396
Garden Tractors & Motor Tillers	116,341	43,795	111,337	48,049
Wheel Tractors, Used	13,174	36,980	6,113	21,890
P&A, NEC, Wheel Tractors	.....	320,257	.....	363,169
Farm Elevators & Blowers	1,359	2,656	1,307	3,307
P&A, NEC, for Farm Elevators & Blowers	.....	1,733	.....	846
Sprayers, Agri. & Pesticidal, Power Operated	123,572	18,204	185,045	29,365
Sprayers, Agri. & Pesticidal, Hand Operated	4,430,250	5,476	2,908,954	7,525
Parts, NEC, for Agri. & Pesticidal Sprayers	.....	22,680	.....	23,239

SOURCE: U.S. Dept. of Commerce, Industry & Trade Administration.
NEC—Not elsewhere counted or classified.
P&A—Parts and attachments.

Circle (14) on Reply Card—→

Christmas Seals from the past for the future.

Give to Christmas Seals. Then and now, it's a matter of life and breath.

AMERICAN LUNG ASSOCIATION
75th Anniversary
The "Christmas Seal" People

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FARM EQUIPMENT EXPORTS BY TYPE OF PRODUCT, 1978

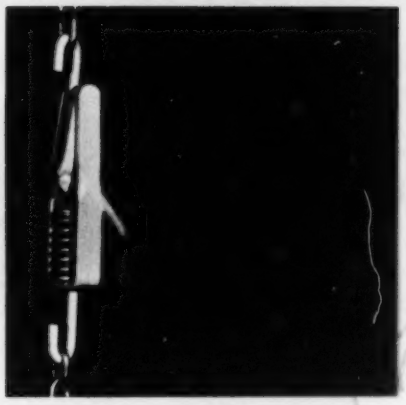
Product	Unit Quantity	Dollar Value in Thousands
Combines, pull-type	2,347	28,546
Combines, self-propelled	5,716	103,658
Cultivators, tractor-drawn or mounted	4,427	9,419
Cultivators, NEC, and Weeders	7,862	5,034
Farm Elevators and Blowers	2,956	7,264
Farm Wagons and Carts	5,538	4,160
Parts for Farm Wagons and Carts	.....	2,112
Fertilizing Machines	18,138	20,297
Harrows, Disk	7,809	20,112
Harrows, NEC, & Soil Pulverizers	11,918	11,311
Parts for Harrows, Stalk Cutters & Soil Pulverizers	.....	14,560
Harvesting Machines, NEC	9,936	64,363
Harvesting Machine Parts	.....	76,248
Hay Balers	8,887	32,529
Haying Machines, NEC (incl. rakes & tedders)	7,939	15,685
Parts for Haying Machines	.....	27,141
Mowers, Cutterbar, tractor-drawn	2,555	4,073
Mowers, Rotary, tractor-drawn (excl. lawn mowers)	3,271	3,431
Mowers, NEC, tractor-drawn (excl. lawn mowers)	2,749	6,126
Planting Machines	4,536	6,869
Plows, Disk	6,311	8,301
Plows, Moldboard	3,043	7,354
Plows & Listers, NEC	5,199	7,831
Parts for Plows, Listers, Cultivators & Weeders	.....	27,302
Seeding Machines	10,682	16,531
Parts for Planting, Seeding & Fertilizing Machines	.....	19,261
Farm Tractors:		
Under 40 PTO HP	4,426	14,932
40-59 PTO HP	1,970	15,846
60-79 PTO HP	2,955	29,761
80-99 PTO HP	2,673	41,217
100-119 PTO HP	4,628	81,263
120-139 PTO HP	5,293	98,064
140-159 PTO HP	2,530	56,603
160-179 PTO HP	840	23,395
180 HP & Over	2,052	63,043

SOURCE: U.S. Dept. of Commerce, Industry & Trade Administration.
NEC—Not elsewhere counted or classified.
P&A—Parts and attachments.

For complete listing of manufacturers and addresses, see the

I&T PRODUCT FILE

published annually on March 31



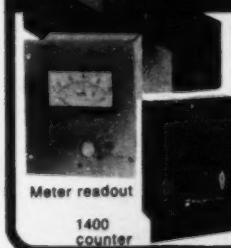
NEW! Brownie Spring-tension LOAD BINDER

. . . entrapped spring exerts constant 1/8 ton pull on chains up to 1/4" . . . stress load per unit is 2000 pounds! Cushions shocks which damage loads. "Yielding" loads like plastic and aluminum irrigation pipe or recreational and boat trailers need the built-in "inch-of-give" or "compensating take-up" these load binders provide. Made by the same folks who've manufactured the famous Brownie CHAIN TIGHTENER used by livestock truckers for nearly a third of a century. Dealerships Available

Brownie
MANUFACTURING COMPANY INC
402-786-2715 WAVERLY, NE 68462

Circle (16) on Reply Card

High Pressure Flow Meter for oils, fuels, liquids



Low cost turbine flow meter – reads flow of hydraulic circuits, test stands, machine tools, etc. Flow – 1-200 GPM. Max. – 5000 PSI.

Meter readout

1400 counter

Send for Bulletins 104 and 304

Circle (17) on Reply Card

Universal hydraulic test unit measures GPM, PSI, F, RPM –

all from one point in the system. Can be switched instantly to remote sensors for GPM, RPM, °F ratings – even when no hydraulic tests are being performed.

Send for Bulletin 202

Circle (18) on Reply Card

Flo-tech, Inc.

VALUE OF FARM EQUIPMENT EXPORTS BY COUNTRY OF DESTINATION, 1978

Value in thousands of dollars. (Excluding agricultural tractor parts)

Western Hemisphere			
Canada	$663,017	Venezuela	$ 53,037
Mexico	82,339	Trinidad	1,673
Guatamala	8,560	Ecuador	6,242
Salvador	4,457	Bolivia	2,247
Honduras	6,276	Chile	2,597
Nicaragua	3,786	Brazil	1,509
Costa Rica	7,329	Uruguay	2,238
Panama	3,175	Paraguay	1,036
Jamaica	1,780	Argentina	4,028
Dominican Republic	2,823	Other W. Hemisphere	4,697
Colombia	12,584	Total W. Hemisphere	875,410
Europe			
Sweden	$ 8,542	Austria	$ 1,315
Finland	1,014	Hungary	13,068
Norway	409	Switzerland	2,131
Denmark	2,718	U.S.S.R.	1,862
United Kingdom	14,367	Spain	7,994
Ireland	1,075	Italy	6,506
Netherlands	10,715	Yugoslavia	8,128
Belgium	10,152	Greece	6,428
France	44,136	Other Europe	1,382
West Germany	17,927	Total Europe	159,869
Middle East			
Turkey	$ 1,451	Saudi Arabia	$ 6,490
Iran	17,861	Other Middle East	2,747
Israel	11,139		
Jordan	1,590	Total Middle East	41,278
Asia and Pacific			
Thailand	$ 2,639	New Zealand	$ 3,813
Indonesia	2,594	China (Taiwan)	1,140
Philippines	3,356	China	1,080
S. Korea	3,024	Other Asia-Pacific	3,925
Australia	68,974	Total Asia-Pacific	90,545
Africa			
Lybia	$ 16,188	Nigeria	$ 3,989
Egypt	13,200	Kenya	1,990
Sudan	4,394	Rep. South Africa	18,833
Ivory Coast	5,683	Other Africa	5,215
Ghana	1,708	Total Africa	71,200

Total Exports, Agricultural Tractors & Equipment	$1,257,285
Exports of Agricultural Tractor Parts	326,000
Total Exports	$1,583,285

Source: U.S. Dept. of Commerce, Industry & Trade Administration.

Don't sell too low... and don't pay too much... stay up-to-date on used equipment values with I&T

IMPORTS OF FARM EQUIPMENT BY PRODUCT

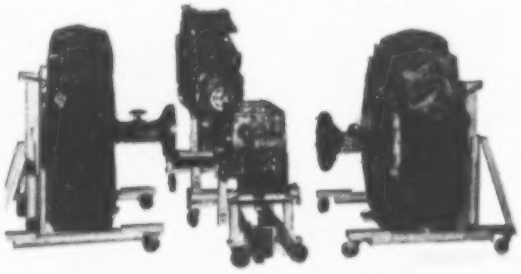
Product	Jan.-Dec., 1977 Quantity	Jan.-Dec., 1977 Value in Thousands of Dollars	Jan.-Dec., 1978 Quantity	Jan.-Dec., 1978 Value in Thousands of Dollars	Jan.-June, 1979 Quantity	Jan.-June, 1979 Value in Thousands of Dollars
Knives & Cutting Blades	7,441,408	3,738	6,864,882	4,905	3,163,962	1,998
Plows & Listers	11,140	16,772	6,847	9,142	6,175	6,337
Cultivators & Weeders	18,140	22,337	13,952	18,356	10,212	14,989
Parts of Plows, Cultivators, Weeders & Listers	.....	23,236	.....	23,501	.....	15,079
Harrows, Rollers, Stalk Cutters, Soil Pulverizers	22,251	13,750	48,977	8,580	18,113	5,774
Planting, Seeding & Fertilizing Machinery	36,035	49,338	46,919	39,634	17,912	19,861
Haying Machinery other than Mowers	8,978	10,895	6,582	8,464	6,717	12,467
Mowers except Lawn Mowers	11,654	10,670	11,581	13,450	11,850	12,929
Harvesting Machines, NES	30,858	232,030	22,382	226,333	11,286	148,187
Farm Wagons & Carts	20,447	9,704	10,546	9,304	6,490	6,592
Agricultural Machines & Implements, NES	.....	46,845	.....	62,436	.....	47,792
Parts of Agricultural Machines, NES	.....	140,791	.....	131,725	.....	96,125
Tractors, Agricultural, Wheel-Type, New, excluding Industrial*	55,390	263,249	92,049	448,216	58,000	329,248
Tractors, Agri., Used	3,333	17,238	4,284	23,435	2,318	14,809
Parts for Agri. Tractors	.....	311,894	.....	307,704	.....	230,449

SOURCE: U.S. Dept. of Commerce, Industry & Trade Administration.
NES—Not elsewhere specified.
*Use of the term "industrial" here is understood to refer to such machines as fork-lifts but not to industrial tractors as commonly defined in the farm and industrial equipment industry.

COFER

Heavy Duty
Tractor Splitting Stands
and Tire Carts

PATENTS APPLIED FOR



- 60 Day satisfaction guarantee
- 1 set of stands fits all tractors (frame or frameless)
- One man installation in less than 5 minutes
- Heavy 6" castors for easy roll

LIKE ADDING A GOOD MAN TO YOUR SHOP

Cofer Sales & Manufacturing Co.
1011 Central Dodge City, KS 67801 (316) 227-6170

Circle (29) on Reply Card

Hahn
P-61 PUMP

put a proven performer at the heart of your sprayer

since 1948

- BELT OR PTO DRIVE
- UP TO 15 G.P.M.
- POSITIVE DISPLACEMENT
- 0 to 150 P.S.I.
- SELF-PRIMING
- EASY WEAR-ADJUSTMENT

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DOLLAR VALUE OF FARM EQUIPMENT
IMPORTS BY COUNTRY OF ORIGIN, Jan., 1975-June, 1979
(In thousands)

Country	Jan.-Dec. 1975	Jan.-Dec. 1976	Jan.-Dec. 1977	Jan.-Dec. 1978	Jan.-June 1979
Canada	$544,661	$601,760	$619,662	$506,728	$408,755
Mexico	7,595	7,300	8,363	6,277	4,962
Brazil	NA*	NA*	NA*	2,194	560
Sweden	997	941	2,077	1,708	2,738
Norway	1,351	1,666	1,751	1,075	568
Denmark	5,619	4,931	4,054	4,513	3,880
Netherlands	13,859	13,638	13,560	12,690	10,813
United Kingdom	103,853	102,208	110,071	125,241	106,079
Belgium	76,100	75,979	78,191	66,347	48,785
France	39,060	36,386	36,715	36,351	38,629
West Germany	93,787	90,139	118,861	141,392	122,606
Austria	625	2,255	1,219	783	620
Hungary	2,531	6,978	4,474	4,673	4,936
U.S.S.R.	3,917	1,806	1,415	1,113	249
Poland	5,006	582	3,705	1,746	535
Romania	8,465	10,029	10,451	8,372	6,161
Italy	33,134	32,077	50,246	75,066	40,325
Spain	5,338	4,614	4,326	3,768	4,247
Israel	483	882	940	1,545	1,357
New Zealand	762	1,396	2,525	1,918	2,611
Australia	7,116	4,988	3,642	3,218	2,924
Japan	25,610	39,360	73,861	167,858	131,746
China (Taiwan)	NA*	NA*	1,273	1,446	1,197
South Africa	NA*	NA*	3,830	3,972	2,353
Others	7,270	9,490	2,347	2,762	2,667
TOTAL	**$997,139**	**$1,049,405**	**$1,157,560**	**$1,182,758**	**$950,406**

SOURCE: U.S. Dept. of Commerce, Industry & Trade Administration.
*Data not available, included with "others."

DEUTZ... The intelligent choice for a dealership that's different.

1. A complete line of 43 to 140 PTO hp tractors. Powered by the world-famous Deutz air-cooled diesel engine. All models available with high performance 4-wheel or 2-wheel drive. **2. Known for superior fuel economy.** Owners attest to substantial savings over most liquid-cooled engines. **3. Less downtime** because Deutz has eliminated the liquid cooling system, the major source of engine trouble. **4. Quality construction,** as evidenced by the fact that Deutz cylinder heads are machined so precisely that head gaskets are not used, except on turbo-charged models. **5. Service is easier and faster.** Snap off a few panels and you have easy engine accessibility. Most engine parts are interchangeable as are many transmission and hydraulic parts. You can serve your customers better with a smaller parts inventory than other lines require. **6. Powerful performance,** because Deutz uses highly efficient mechanical-drive transmissions with velvet-smooth synchromesh on most models. POWERMATIC HI-LO on DX 140 and DX 160. **7. Saleable features** such as: new luxurious MasterCab, new Multi-Fit seat, safety frames with canopies, weather enclosures, Deutz Claw Hitch, new push-pull hydraulic couplers and many more. **8. Good profit margin** at competitive prices. **9. Excellent warranty,** for 1500 hours or two years covering engine and power trains on new tractors. **10. Generous support.** Contact your nearest Deutz Region Office today to find out about floor plan, retail financing, volume bonus, performance bonus and other profit-making features.

Join Deutz, the new power in the country.

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Central Region
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Davenport, IA 52802
319/326-2581

North Central Region
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Hilliard, OH 43026
614/876-7334

Ontario Dealers
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DEUTZ

Circle (24) on Reply Card

WHEEL TRACTOR IMPORTS 1977

New, Agricultural, excluding garden

Country of Origin	UNDER 35 BHP Unit Quantity	UNDER 35 BHP Value in Thousands of Dollars	UNDER 35 BHP Value Ratio 77/76	OVER 35 BHP Unit Quantity	OVER 35 BHP Value in Thousands of Dollars	OVER 35 BHP Value Ratio 77/76	N.E.S. except industrial* Unit Quantity	N.E.S. except industrial* Value in Thousands of Dollars	N.E.S. except industrial* Value Ratio 77/76
Canada	8	108	3.183	1,295	42,621	.97	981	22,527	10.30
United Kingdom	110	485	.57	5,125	29,194	1.17	384	1,849	.48
U.S.S.R.	1	3	NA	6	34	.22	294	1,275	.81
Japan	11,556	24,779	2.47	7,059	18,319	2.37	10,390	16,931	1.44
W. Germany	1,066	7,609	.82	3,689	28,311	.93	4,522	32,897	4.32
Italy	30	68	2.79	2,502	12,475	4.11	532	4,684	1.25
Brazil	49	141	NA	4	53	NA	.....	.....	.....
France	.....	.....	.....	13	411	.95	18	624	1.36
Poland	.....	.....	.....	575	2,889	NA	.....	.....	.....
Romania	.....	.....	.....	4,435	10,571	1.04	1	7	NA
Mexico	.....	.....	.....	3	33	NA	24	168	NA
Netherlands	.....	.....	.....	6	44	.92	.....	.....	.....
Spain	.....	.....	.....	4	19	NA	35	324	NA
Belgium	.....	.....	.....	257	1,970	13.34	148	1,238	.33
Sweden	.....	.....	.....	.....	.....	.....	2	118	70.08
Austria	.....	.....	.....	.....	.....	.....	26	474	NA
Norway	.....	.....	.....	.....	.....	.....	19	37	NA
Hungary	.....	.....	.....	.....	.....	.....	119	441	1.65
Yugoslavia	.....	.....	.....	.....	.....	.....	2	15	NA
TOTALS	**12,820**	**33,193**	**1.53**	**24,973**	**146,477**	**1.21**	**17,597**	**83,609**	**2.37**

SOURCE: U.S. Dept. of Commerce, Industry & Trade Administration.

*Use of the term "industrial" here is understood to refer to such machines as fork-lifts but not industrial tractors as defined in the farm and industrial equipment industry.

N.E.S.—Not elsewhere specified.

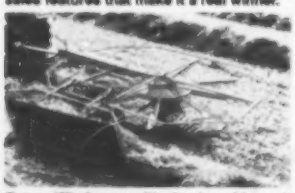
DEUTZ-FAHR... The intelligent choice for an additional profitable line.

A Deutz-Fahr dealership can be as valuable and profitable to you as it is to hundreds of successful Deutz dealers in North America. Farmers are keenly aware of the need to retain maximum protein in hay and forage. And that's what the Deutz-Fahr complete circle haymaking system is all about. Check the features below and you'll see many of the selling advantages offered by Deutz-Fahr equipment. Then consider the generous floor planning and retail financing available through our own subsidiary — the reliable, helpful back-up from our district managers, service representatives, and regional staff — plus the solid Deutz-Fahr reputation for quality — and you have the reasons why you should talk with us now about a profitable Deutz-Fahr dealership.

KM 400 T pull-type Turbo Drum Mower gives amazingly high output as it slides uniformly over the ground. Fast, efficient. Has 9' cutting width. Four mowing drums. Eight blades. Available with tractor drawbar or lateral flotation equipment.

KM 22 or 25 Turbo Drum Mower. Counter-rotating drums assure clean, non-stop, high-speed mowing without plugging, even when crop is damp. Two 3-pt hitch models, 5'6" to 7' cutting widths, cut five to ten acres per hour. Plus a host of other sales features that make it a real winner.

Centipede Haymaker lifts, turns, fluffs, spreads and flexes stems to release moisture. Provides maximum yields with higher protein content due to fast air-drying. Has 16'4" working width. Available in 3-pt hitch or pull type models. A money-maker for farmers and you.



Rotary Windrower with circular raking patterns provides clean tangle-free aerated windrows. Gentle turning of wet crops after rain. Gentle handling prevents leaf loss, thus retaining maximum protein. Available in 3-pt hitch or pull type models.

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Davenport, IA 52802
319/326-2581

North Central Region
3600 Parkway Lane
Hilliard, OH 43026
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NEW AGRICULTURAL WHEEL TRACTOR IMPORTS, 1978

(Excludes garden tractors except as indicated in headings, footnotes.)
Number of units/Value in thousands of dollars

Nation of Origin	Under 40 HP*	40-79 HP*	80-99 HP*	100 HP and over*	HP Not Specifically Provided*	Not Elsewhere Specified, Excluding Industrial, Including Garden Types**	TOTALS
Canada	100/$232	246/$2,667	296/$8,316	761/$24,263	1,532/$53,033	873/$17,673	3,808/$106,157
United Kingdom	342/1,625	924/6,306	1,382/8,238	56/525	1,308/8,921	5,171/34,387	9,183/60,002
Belgium	10/62	390/2,799	.....	126/983	93/701	217/1,446	836/5,991
France	.....	22/827	.....	.....	13/281	1,361/250	1,396/1,358
West Germany	414/2,113	3,727/27,326	1,308/14,201	1,059/11,708	1,634/15,862	1,119/12,545	9,261/83,755
Poland	150/748	.....	.....	60/516	20/112	.....	230/1,376
Italy	615/2,178	623/2,751	495/4,347	28/141	432/12,187	801/6,117	2,994/27,721
Rumania	1,371/4,727	1,297/2,945	.....	.....	3/23	177/458	3,448/8,153
Spain	.....	142/678	4/21	1/21	9/52	4/22	160/794
U.S.S.R.	.....	46/172	.....	.....	3/18	100/652	149/842
Norway	.....	.....	.....	.....	.....	86/201	86/201
Hong Kong	83/298	.....	.....	.....	.....	.....	83/298
Japan	42,626/115,416	1,440/8,937	60/188	455/1,491	1,681/4,277	13,999/20,147	60,261/150,456
Hungary	.....	.....	.....	.....	.....	84/235	84/235
Other	29/113	34/659	1/14	1/17	1/3	4/40	70/846
TOTALS	46,340/$127,512	8,891/$56,068	3,546/$35,325	2,547/$39,667	6,729/$95,470	23,996/$94,174	92,119/$449,062

Source: U. S. Dept. of Commerce, Industry & Trade Administration.
*Excluding garden tractors. **Including garden types. The term "industrial" here is understood to refer to such machines as fork-lifts, but not industrial tractors as defined in the farm and industrial equipment industry.

COUNT ON WW TO...
DOUBLE YOUR FASTENER SALES
YOUR CONVENIENCE!
Western Wire's unique single unit price practically does the selling for you!

"One-Price Pak" Poly-bagged Hitch Pin Clips

"Full Value Package" Boxed Cotter Pins

- 10 self-serve units in each package
- Each unit priced the same
- Quantity of fasteners varies according to size

WESTERN WIRE PRODUCTS COMPANY
1415 South 18th St. • St. Louis, Mo. 63104

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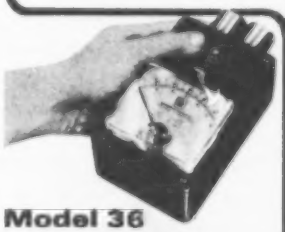
PIONEER TACHOMETERS
MEASURE RPM INSTANTLY
No Electrical or Mechanical Connections Required


Model 36
Self contained, easy-to-use. Hold like flashlight and measure speeds up to 12,000 RPM. No wires or mechanical connections required. Just point, press button and read RPM.

Model 1030
Unique Tachometer Gun is easy-to-use. Self contained power unit. Measure RPM in 4 speed ranges: 1,000-3,000-10,000-30,000. Solid State Transistorized circuits. Many other features.

Write Today For More Information

PIONEER ELECTRIC & RESEARCH CORP.
743 Circle Avenue, Forest Park, Illinois 60130

Circle (33) on Reply Card

NEW AGRICULTURAL WHEEL TRACTOR IMPORTS, JAN.-JUNE, 1979

(Excludes garden tractors except as indicated in headings, footnotes.)
Number of units/Value in thousands of dollars

Nation of Origin	Under 20 HP*	20-29 HP*	30-39 HP*	40-79 HP*	80-99 HP*	100 HP and Over*	HP Not Specifically Provided*
Canada	9/$29	12/$30	66/$271	302/$5,079	179/$5,247	445/$15,563	748/$33,000
United Kingdom		109/617	237/1,304	3,219/25,930	2,585/17,621	24/195	90/641
Belgium	1/7		3/20	23/224			12/156
West Germany	1/4		25/176	4,333/38,190	1,454/18,418	1,170/18,454	275/3,291
Italy	72/313	168/583	81/304	818/6,607	178/2,162	3/63	11/73
Rumania	242/1,112		685/1,271	1,287/3,013			7/67
Spain				64/506			14/94
U.S.S.R.		50/59					
Japan	10,976/27,892	12,035/40,144	10,557/33,909	701/5,318		347/670	505/1,308
Others				15/247		1/30	
TOTALS	11,301/$29,358	12,374/$41,434	11,654/$37,258	10,762/$85,114	4,396/$43,647	1,990/$34,976	1,662/$38,627

Source: U. S. Dept. of Commerce, Industry & Trade Administration.
*Excluding garden tractors. **Including garden tractors. The term "industrial" here is understood to refer to such machines as fork-lifts, but not industrial tractors as defined in the farm and industrial equipment industry.

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Barrentine Manufacturing Company

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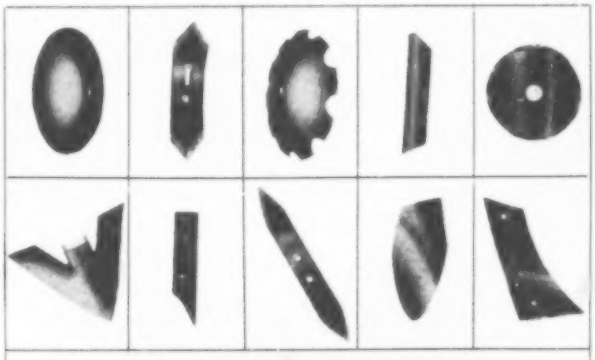

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FEMA

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Not Elsewhere Specified, Excluding Industrial, Including Garden Types**	Totals	
299/$4,188	2,060/$63,407	Canada
984/7,434	7,248/53,942	United Kingdom
	39/407	Belgium
127/1,512	7,385/80,047	West Germany
297/2,573	1,628/12,678	Italy
2/22	2,223/5,495	Rumania
27/242	105/842	Spain
12/103	62/162	U.S.S.R.
2,031/2,714	37,152/111,955	Japan
82/47	98/324	Others
3,861/$18,834	58,000/$329,248	TOTALS

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Company Address

Type of business

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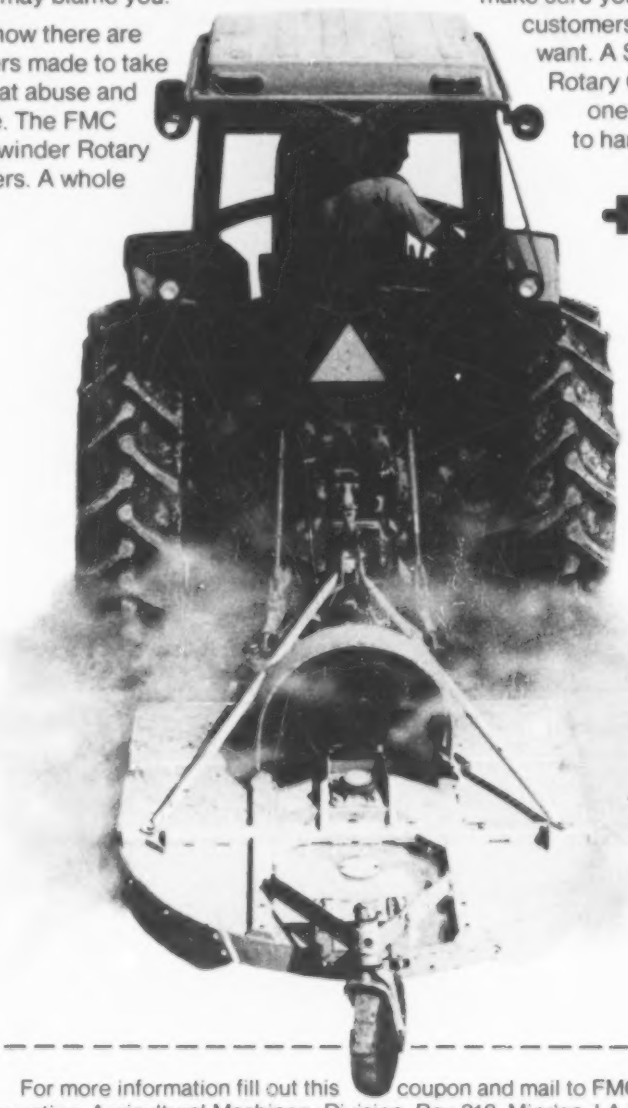

For more information fill out this coupon and mail to FMC Corporation, Agricultural Machinery Division, Box 818, Minden, LA 71055.

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Value of Shipments, 1974-1978

(In thousands of dollars)

I—Farm Machines and Equipment

	1978	1977	1976	1975	1974
Planting, Seeding and Fertilizing Machinery	499,070	550,782	516,847	480,273	354,436
Harrows, Rollers, Pulverizers, Stalk Cutters	466,621	465,974	478,322	476,274	394,993
Plows	190,844	239,151	266,660	250,134	182,301
Harvesting Machinery	1,782,295	1,599,722	1,435,307	1,253,430	1,093,207
Haying Machinery	522,370	469,715	508,250	481,334	407,652
Farm Dairy Machines and Equipment	109,116	97,347	77,087	68,037	80,309
Sprayers and Dusters	168,679	161,709	158,848	155,752	139,287
Farm Elevators and Blowers	148,002	114,691	87,611	100,404	91,952
Cultivators and Weeders	189,439	140,079	224,013	227,440	162,786
Machines for Preparing Crops for Market or Use	356,311	308,932	233,656	262,379	254,921
Farm Poultry Equipment	148,465	127,867	100,472	70,023	76,154
Hog Equipment	76,310	54,481	59,793	37,574	45,480
Other Barn and Barnyard Equipment	219,171	188,150	160,580	137,250	167,521
Garden Tractors, Motor Tillers	686,375	574,702	586,278	553,269	561,250
Farm Wagons, Other Farm Transportation Equipment (1)	203,212	183,934	173,130	178,577	186,204
TOTALS	**5,766,280**	**5,277,236**	**5,066,854**	**4,732,150**	**4,198,453**

Source: U.S. Dept. of Commerce, Bureau of the Census, Current Industrial Reports, Farm Machinery and Equipment (MA-35A).

II—Wheel Tractors and Attachments

	1978	1977	1976	1975	1974
Wheel Tractors, Farm Type	2,262,291	2,424,139	2,235,111	2,099,501	1,509,806
Wheel Tractors, Non-Farm (2)	132,451	115,458	93,876	118,531	160,688
Attachments for Wheel Tractors, Farm and Non-Farm	NA	34,780	37,472	35,040	35,937
Parts for Wheel Tractors, Farm and Non-Farm	NA	420,273	279,637	222,575	238,970
TOTALS		**2,994,650**	**2,646,096**	**2,475,647**	**1,945,401**

(1) Data for 1976, 1977 and 1978 include operator cabs in attachments and parts for these items.
(2) Industrial Type, excluding tractor chassis, shipped as a part of front engine mount, integral design tractor shovel loader/backhoes.
Source: U.S. Dept. of Commerce, Bureau of the Census, Current Industrial Reports, Tractors, Except Garden Tractors (M35S).

NA—Not available or not applicable.

Circle (38) on Reply Card

Shipments of Farm Machines and Equipment

(In units, 1974-1978)

Type of Farm Equipment	1978	1977	1976	1975	1974
Balers, Hay, All Types:					
Bales Under 200 lbs.	22,659	24,876	26,054	27,718	35,133
Bales Over 200 lbs.	21,303	17,745	24,097	21,400	6,757
Blowers (includes forage type, combination grain-forage type)	13,159	10,348	9,826	10,082	13,507
Cabs (Metal), Farm Tractor	11,215	6,766	12,216	11,734	17,150
Cabs, Other Equipment	8,759	9,025			
Cleaners, Barn (gutter cleaners for stanchion barns)	10,239	9,445	9,185	9,563	12,268
Combines, Grain, Pull Type and Self-Propelled	31,843	31,943	31,712	31,259	28,644
Combines, Peanut	1,572	1,790	1,919	2,647	2,131
Combine Attachments:					
Corn Heads	18,629	24,035	25,087	26,741	29,228
Corn Pickers	(1)	(1)	4,404	4,536	6,390
Cotton Strippers (all types)	1,900	1,816	1,127	1,361	2,612
Cultivators, Corn and Cotton Types (2)	31,782	33,999	40,299	48,404	41,450
Cultivators, Field:					
Pull Type	12,352	17,470	22,703	21,709	18,923
Mounted	4,417	8,992	9,239	8,469	6,692

In some cases I&T has combined data because of space limitations. If you need more information from MA-35A, write us.
DATA: Current Industrial Reports, Series MA-35S, Bureau of the Census.
(1) Data combined under Harvesting Machinery, Other.
(2) Rear-mounted only; data for front-mounted machines are combined under Cultivators and Weeders, Other.

(*More...*)

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Shipments of Farm Machines and Equipment

(in units, 1974-1978)

Type of Farm Equipment	1978	1977	1976	1975	1974
Cultivators, Rotary:					
Ground Driven, Sections and Machines (3)	14,197	16,219	.....	.....	.....
Ground Driven, Integrally Mounted	7,574	8,637	12,034	17,136	17,974
Power Driven	628	672	1,186	9,513	8,058
Cultivators and Weeders, Other	42,148	46,372	30,659	20,296	.....
Curers, Tobacco	2,571	4,315	10,459	14,839	12,245
Cutters and Shredders or Rotary Mowers (pto):					
Flail Type	9,266	12,409	12,096	11,359	14,954
Horizontal Blade Type	69,677	79,953	74,562	76,412	117,865
Dairy Cattle Chain Tie Stalls	56,873	49,039	47,026	32,885	54,253
Dairy Cattle Milking Parlor Stalls	23,169	17,854	19,606	14,840	33,215
Dairy Cattle Stanchions, Swing Type	134,568	83,331	64,093	52,033	93,180
Dairy Cattle Stalls for use with stanchions	42,141	32,877	36,732	22,244	37,554
Diggers, Peanut (shakers and windrowers but not including combines)	2,002	2,517	1,706	2,207	2,418
Distributors (Fertilizer):					
Dry	10,896	11,446	13,310	12,306	16,221
Liquid	7,230	6,619	5,635	4,997	6,456
Anhydrous Ammonia	6,294	6,562	8,458	5,233	4,187

In some cases I&T has combined data because of space limitations. If you need more information from MA-35A, write us. (More...)
DATA: Current Industrial Reports, Series MA-35S, Bureau of the Census.
(3) Includes data for integrally mounted machines, under 4-row.

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Shipments of Farm Machines and Equipment
(in units, 1974-1978)

Type of Farm Equipment	1978	1977	1976	1975	1974
Dryers, Grain, Hay and Seed Batch Type pto or Electric-Motor Operated	11,760	10,373	6,525	6,268	7,343
Continuous Flow Type	2,281	4,362	2,446	2,529	3,981
Heated Air Units	25,311	26,692	20,933	22,011	23,457
Dusters, Power, All Types	574	875	2,095	2,152	1,707
Elevators, Portable:					
Single Chain	6,100	5,004	5,625	7,196	16,092
Double Chain	8,612	7,174	5,504	10,794	15,372
Auger Type, Under 6 in. dia.	42,504	40,668	28,260	29,684	49,426
Auger Type, 6 in. dia.	79,401	73,628	53,425	55,207	84,302
Auger Type, Over 6 in. dia.	74,884	58,382	51,232	50,016	46,744
Elevators, Stationary and Other	11,442	10,270	5,439	7,329	9,994
Fans, Crop Drying and Aeration	46,451	45,668	24,997	19,586	15,936
Feeders, Bunk, Electric Powered	13,647	11,394	11,770	11,742	16,116
Grain Heads for Combines	48,105	45,892	47,991	62,049	64,837
Grinder-Mixers, Stationary and Portable	16,648	12,393	13,621	15,227	24,202
Harrows, Disk	80,829	96,650	111,009	120,904	112,657
Harrow Sections (Spike-, Spring- and Tine-Tooth)	96,223	103,260	156,562	199,166	159,511
Harvesters, Beet	312	556	1,278	1,016	1,141
Harvesters, Forage, Field, Shear-bar Type, Self-Propelled and Pull	13,003	14,573	16,402	16,036	20,307

(More...)

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Shipments of Farm Machines and Equipment

(In units, 1974-1978)

Type of Farm Equipment	1978	1977	1976	1975	1974
Attachments for Shear-bar Type, Pickup and Cutter-bar Hay Units	10,980	9,126	11,428	13,857	17,496
Row Crop Units, all sizes	13,539	14,687	16,356	15,101	19,757
Flail Type, Including Discharge Spouts	3,972	4,167	6,225	6,756	4,997
Harvesters, Potato	1,312	1,005	1,328	1,273	1,183
Harvesting Machinery, Other	12,130	11,801	7,497	7,500	....
Levelers or Scrapers	160,565	99,287	78,693	82,958	106,742
Loaders, Field, for Baled Hay	5,142	4,136	5,770	5,125	1,827
Loaders, Tractor Mounted, Farm Type, for Manure and General Utility	42,812	27,661	25,846	28,045	40,845
Mills, Feed, Farm Size (Includes Grinders and Crushers of the Hammer, Burr or Roller Types)	8,838	6,508	4,871	9,080	7,386
Mixers, Feed, Farm Size	3,924	2,885	1,802	1,415	1,449
Mowers, Cutter Bar Type (See Cutters for Rotary Type)	12,134	13,962	14,195	25,157	24,396
Mower-Conditioners, Self-Propelled and Pull-Type	29,921	27,517	32,940	35,539	37,258
Planters, Corn and Cotton, All Types	NA	183,089	139,841	92,416	52,545

In some cases I&T has combined data because of space limitations. If you need more information from MA-35A, write us.
DATA: Current Industrial Reports, Series MA-35S, Bureau of the Census.
NA—Not available or not applicable.

(More...)

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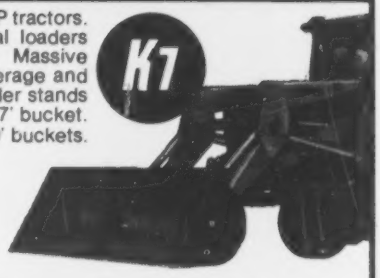

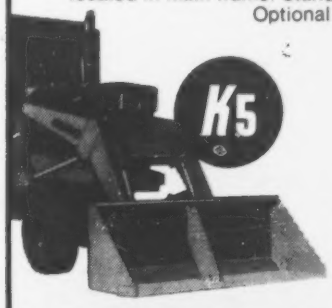

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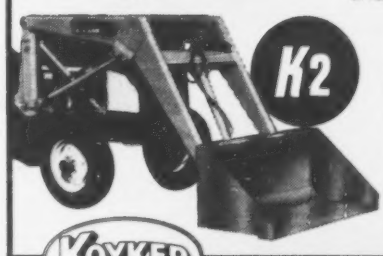

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Shipments of Farm Machines and Equipment

(in units, 1974-1978)

Type of Farm Equipment	1978	1977	1976	1975	1974
Planters, Row Crop Units (quantity in number of rows)	34,762	41,424	83,004	84,387	60,594
Plows, Disk, 1-way, 2-way	184	278	317	357	1,066
Plows, Chisel or Sweep Type:					
Pull-Type	12,090	15,084	21,505	19,351	15,526
Mounted	10,501	15,194	16,694	16,547	13,940
Plows, Terracing and Ditching	2,039	2,261	2,938	2,536	2,752
Plows, Moldboard:					
Pull-Type, 1-way	2,516	4,438	6,938	5,833	3,355
Mounted, 1-way	11,852	15,771	16,513	17,565	24,802
Semi-Mounted, 1-way	14,099	22,294	23,841	27,283	26,734
Pull-Type and Mounted, 2-way	3,473	3,822	5,369	5,978	5,652
Plows, One-Way Diskers	(4)	539	1,556	1,767	2,742
Plows, Subsoilers (deep tillage)	4,794	8,129	5,527	5,143	3,800
Plows, Other (except snow)	2,891	1,795	1,646	1,248	1,223
Rakes, Hay, Side-Delivery, Cylinder and Finger Wheel Types	20,620	20,328	21,896	22,591	21,010
Rollers and Harrow Mulchers	8,384	8,619	10,018	10,453	13,091
Silo Unloaders, Tower Type	26,328	25,899	21,556	20,288	27,822
Sprayers, Field and Row Crop Type:					
Power, Self-Propelled	3,103	2,941	3,686	4,583	5,273
Power, Tractor-Mounted	21,230	17,228	15,340	19,539	25,853
Power, Non-Tractor-Mounted	13,542	13,498	15,151	17,965	25,542

In some cases I&T has combined data because of space limitations. If you need more information from MA-35A, write us.
DATA: Current Industrial Reports, Series MA-35A and M-35S, Bureau of the Census.
(4) Data combined under Plows, Other.

(More...)

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For More Information on Products Use I&T's Handy Reply Card

Shipments of Farm Machines and Equipment

(in units, 1974-1978)

Type of Farm Equipment	1978	1977	1976	1975	1974
Sprayers, Air-Carried, Power (Field, Row-Crop, Orchard):					
Complete Units	7,353	7,662	7,740	8,694	8,659
Attachment Type			84	153	39
Sprayer Pumps	61,120	49,086	33,547	33,052	38,333
Spreaders, Manure:					
Conveyor Type	16,237	16,688	18,065	19,996	24,248
Tank Type	7,584	7,853	8,174	9,981	13,756
Stackers, Hay	1,422	1,037	4,517	8,972	10,796
Tillers, Motor, Garden Type	556,586	536,394	418,541	844,578	749,449
Tool Bars, Basic Units, Pull or Mounted	6,975	8,639	7,183	7,657	15,230
Tractors, Garden, Riding Type:					
Under 10 hp	61,257	72,909	61,509	40,615	138,705
10 hp and over	301,024	258,789	258,419	188,489	247,675
Tractors, Garden, Walking Type	NA	115,214	120,258	136,296	151,197
Tractors, Tracklaying Type:					
20 to 89 net engine hp	7,862	7,208			
90 to 159 net engine hp	14,211	5,044	18,972	20,453	23,623
Over 159 net engine hp		7,716			
Tractors, Wheel Type:					
Farm Type	136,240	168,888	175,977	187,117	178,478
Non-Farm Type	39,809	17,623	17,747	24,199	33,845
Transplanters, Pull-Type or Mounted, and Broadcast Seeders	27,296	30,250	29,400	25,358	31,240
Wagons, Farm Type (chassis only) and trailer gear	51,912	57,831	59,336	93,570	116,601
Wagon Boxes and Racks for mounting on wagons and trailer gear:					
Manual Unloading or Dump	21,386	16,437	17,202	18,753	23,486
Gravity Unloading (grain type)	31,072	28,714	32,470	41,350	51,773
Power Unloading	18,064	19,135	20,825	22,480	32,641
Wagon Boxes with Integral Running Gear	6,747	6,097	6,107	7,407	6,264
Windrowers or Swathers, Grain Harvesting, Draper Type	617	601	1,225	1,218	757
Windrowers, Haying, Self-Propelled with Conditioner	4,098	6,003	7,386	8,539	7,254

In some cases I&T has combined data because of space limitations. If you need more information from MA-35A, write us.
DATA: Current Industrial Reports, Series MA-35A and M-35S, Bureau of the Census.

Mayhew pilot punches

12 SIZES
match all Standard pin diameters and maximum lengths

These roll and spring pin extractors center perfectly over pin, eliminating damage to pin or wall of holes. Pin is driven completely through hole without sticking punch.

Write for complete information

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DEPT. F
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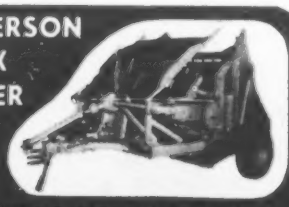
Tel: 413-625-6351

Circle (54) on Reply Card

ANDERSON ROCK PICKER



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A/C 406 442 5550

Circle (55) on Reply Card

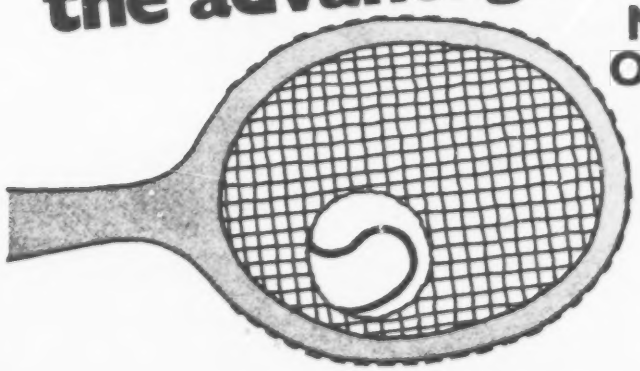
PRODUCTION OF WHEEL TRACTORS (in units)

By Type of Fuel Used (except garden and contractors' off-highway types)

Year	Gasoline	Diesel	LPG	Total
1955	277,105	41,506	11,530	330,141
1956	177,077	26,762	10,815	214,654
1957	179,142	37,352	12,556	229,050
1958	173,040	55,864	12,365	241,269
1959	167,961	79,548	12,407	259,916
1960	84,306	62,033	5,848	152,187
1961	84,102	80,920	6,395	171,417
1962	99,414	80,293	8,394	188,101
1963	96,108	98,609	8,732	203,449
1964	90,004	115,439	7,778	213,221
1965	98,970	138,247	6,833	244,050
1966	107,683	157,352	5,652	270,687
1967	80,630	158,741	2,844	242,215
1968	61,978	147,744	3,477	213,199
1969	59,111	135,118	1,475	195,704
1970	48,981	122,622	(D)	171,603*
1971	40,642	126,859	(D)	167,501*
1972	42,389	154,827	(D)	197,216*
1973	37,860	173,646	(1)	211,506
1974	33,860	176,214	(2)	210,074
1975	27,429	183,484	(2)	210,913
1976	16,690	177,034	(2)	193,724
1977	9,603	175,805	(2)	185,408

(D)—Withheld to avoid disclosing the operations of individual companies.
*Production totals exclude LPG powered tractors which amount to less than 1% of wheel tractors produced.
(1)—For 1973, gasoline and LPG powered tractors 90 horsepower and over have been included with diesel tractors to avoid disclosure of individual company data. These tractors amount to less than 1% of wheel tractors produced.
(2)—Since 1974, LPG and gasoline fuel type tractors are combined.
Data: Current Industrial Reports, Series M35S, Bureau of the Census.

Give every NEWBORN the advantage



MARCH OF DIMES

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Salisbury, MD 21801
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The Cropper Company
P.O. Box 49, 7th at Mulberry
Macon, GA 31202
912/742-2591

Edney Distributing Co., Inc.
P.O. Box 198, Hwy. 14 East
Huron, SD 57350
605/352-8616

Forano, Ltd.
1495 Ste. Anne St.
Plessisville, Quebec, Canada G6L2Y9
819/362-7395

General Implement Distributors, Inc.
P.O. Box 30020, 2955 W. 2100 S.
Salt Lake City, UT 84125
801/972-4321

King Wallace, Inc.
P.O. Box 13125
1284 Channel Ave.
Memphis, TN 38113
901/775-0942

Klughartt Thornhill
1205 Woodswether Rd.
Kansas City, MO 64105
816/421-6296

Lewis Implement Co., Inc.
130 N. Spring St.
Louisville, KY 40206
502/587-1241

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1147 Fairview Ave.
Fort Wayne, IN 46803
219/423-3502

John Miller Supply Co., Inc.
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Parker Montana Company
2100-6th Ave. N.
P.O. Box 31555
Billings, MT 59101
406/245-6627

Polson Company
625 S. Lander St.
Seattle, WA 98134
206/622-2891

Polson Implement Co. of Oregon
208 SE Hawthorne Blvd.
Portland, OR 97214
503/234-7474

Port Huron Machinery & Supply Co.
Box 81708, 801 "Q" St.
Lincoln, NE 68501
402/432-4211

Solex Corporation
P.O. Box 490, 220 S. Jefferson St.
Dixon, CA 95620
916/678-5533

The Southern Plow Co.
Box 10207
1202-14 N. Industrial Blvd.
Dallas, TX 75207
214/742-9074

Wallace Hardware Co., Inc.
P.O. Box 687, Hwy. 25-E South
Morristown, TN 37814
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Wingfield Distributors, Inc.
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DIRECTORY & INFORMATION ON REQUEST

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Circle (58) on Reply Card

How CPR training helps business.

CPR—cardiopulmonary resuscitation training is one of the valuable assets an employee can have.

If even one employee has this training, (which is available from Red Cross), every other co-worker benefits. Everybody can breathe easier knowing that in the event of a cardiac arrest, help is immediately available.

Why not set up a goal for your company... so many employees with CPR training per floor—or area?

It's easy to do. Call your Red Cross Chapter... they'll be glad to help you do it.

CPR training from Red Cross is one way you can help your company be ready. And a way you can help keep Red Cross ready, too.

Keep Red Cross ready.

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PRODUCTION OF TRACTORS (in units)

Year	Wheel-type & Tracklaying	Wheel-type	Tracklaying	Garden Tractors† & Motor Tillers
1925-29 Avg.	185,727	172,179	14,091	4,665
1936-39 Avg.	222,161	197,445	24,716	9,095
1940-44 Avg.	249,336	217,874	31,463	12,987
1945-49 Avg.	442,648	404,230	38,419	126,121
1950	542,446	498,768	43,680	151,198
1951	617,060	567,446	49,614	177,169
1952	463,211	414,560	48,651	199,321
1953	442,247	390,385	51,862	245,609
1954*	285,159	245,755	39,404	191,235
1955	377,114	330,141	46,973	185,696
1956	272,265	214,654	57,611	200,997
1957	265,852	229,050	36,802	178,542
1958	265,495	241,269	24,226	227,073
1959	297,078	259,916	37,162	327,083
1960	178,500	152,187	26,313	416,455
1961	191,191	171,417	19,774	389,861
1962	207,281	188,101	19,180	421,833
1963	224,306	203,449	20,857	347,413
1964	240,579	213,221	27,358	416,486
1965	271,751	244,050	27,701	422,342
1966	299,114	270,687	28,427	507,606
1967	262,061	242,215	19,846	560,387
1968	236,023	213,199	22,824	583,265
1969	218,547	195,704	22,843	529,746
1970	191,679	171,603	20,076	498,372
1971	186,249	167,501	18,748	491,117
1972	218,213	196,988	21,225	662,583
1973	236,944	212,072	24,872	847,427
1974	233,825	210,074	23,751	1,287,026
1975	231,968	210,913	21,055	1,209,978
1976	213,154	193,724	19,430	858,727
1977	205,285	185,408	19,877	874,354
1978	196,860	174,659	22,201	918,866**

*Figures subsequent to 1954 exclude contractors' off-highway wheel type.
†Figures represent manufacturers' shipments subsequent to 1957. Production not available on comparable basis.
**Excludes walking-type tractors.
Data: Current Industrial Reports: Series M35S and M35A, Bureau of the Census.

NEW DRY EDIBLE BEAN COMBINE HARVESTER

Light, low cost, drawn combine harvester with axial-flow threshing drum for delicate seed handling. High capacity, low power requirements. Simple and purposeful design ensures low operating and maintenance cost. Low friction pick-up. Optional chaff blower to have overflow of threshing drum available as high quality fodder.

Prospective importers are invited to supply relevant information to:

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AREA CODE 01441 PHONE 6069;
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Circle (59) on Reply Card

CrustBuster
FARM EQUIPMENT

Positive Depth Soybean Drills plant like planters, save money for farmers and make money for Dealers.

Our pair of doubles beats every drill on the market:

Double-disc openers, followed by double firming wheels, are individually mounted as a pair, with a positive depth stop.

With beans planted at ideal depth for field and moisture conditions, firming wheels leave a center crown of soft soil over them. Double firming wheels press along each side of the seed, leaving faint tracks which channel the puddling of rainwater to the sides. Resulting crust is then heaviest beside– not over– the emerging plants.

New, improved CrustBuster front wheel drive. Patented wobble slot feeds gently, meters and spaces beans more evenly for a uniform stand – solid or rowed.

Three-point, or pull-type models that fold by hydraulics for towing on their own wheels at normal road speeds and even back into sheds without any nonsense.

Farmers learn fast that CrustBuster farm equipment saves time and money: Grain Drills • Offset Discs • Field Cultivators • Chisel Plows • and the original Springtooth-Cultivator that gave us our name. Each line starts with standard widths, but stretches section by section to the widest in the field, folding for towing.

Dealers who take on the affordable portables know them as the profit line. Call (316) 385-2651 or write CrustBuster, Inc., Box 337, Spearville, KS 67876.

CrustBuster
AFFORDABLE PORTABLES PUT
MORE PROFITS
IN YOUR POCKET! ® CrustBuster, Inc.

Circle (61) on Reply Card

State	40-49	50-59	60-69	70-79	80-89	90-99	100-119
Alabama	689	302	289	145	332	81	316
Arizona	68	26	61	32	60	52	109
Arkansas	780	297	230	73	123	22	158
California	555	625	902	446	467	100	387
Colorado	99	55	69	15	67	17	101
Connecticut	61	40	32	9	18	2	21
Delaware	15	21	31	6	25	5	23
Florida	439	279	502	312	299	28	184
Georgia	860	342	386	283	360	65	395
Idaho	73	95	123	39	145	40	166
Illinois	312	342	460	344	496	121	1,003
Indiana	332	390	485	237	438	64	667
Iowa	121	222	538	333	684	234	1,598
Kansas	109	116	143	77	188	109	549
Kentucky	1,304	974	779	339	464	79	225
Louisiana	488	184	219	96	101	33	134
Maine	65	44	37	13	29	3	36
Maryland	160	104	134	48	72	25	89
Massachusetts	41	36	21	6	15	2	6
Michigan	340	413	456	196	346	88	415
Minnesota	161	274	543	322	625	207	1,307
Mississippi	619	274	278	118	228	46	279
Missouri	667	551	544	261	484	123	592
Montana	39	73	89	40	87	33	130
Nebraska	51	57	115	76	232	137	818
Nevada	3	7	10	4	14	4	15
N. Hampshire	51	39	23	6	11	4	10
New Jersey	83	52	51	14	50	5	41
New Mexico	76	41	35	29	18	5	35
New York	324	433	565	234	401	84	382
North Carolina	1,190	602	598	361	587	74	405
North Dakota	25	39	74	37	72	53	408
Ohio	682	699	760	320	616	130	712
Oklahoma	486	195	220	82	197	105	372
Oregon	314	266	174	50	122	36	131
Pennsylvania	441	464	553	150	413	88	338
Rhode Island	9	4	5	.....	2	3	3
South Carolina	476	214	203	164	195	17	134
South Dakota	24	50	128	58	196	103	602
Tennessee	1,148	658	512	260	432	55	338
Texas	1,727	811	721	389	548	153	799
Utah	94	103	111	26	63	19	93
Vermont	47	89	74	37	58	9	35
Virginia	801	385	370	141	295	44	209
Washington	479	416	184	45	102	32	92
West Virginia	300	150	79	18	24	2	15
Wisconsin	220	552	954	423	843	206	947
Wyoming	21	29	37	24	42	12	60
Alaska	4	3	3	7	1	2	.....
Hawaii	32	17	7	6	4	1	2
US Government	2	4	14	5	.....	5	8
Miscellaneous	11	.....	10	9	3	10	16
TOTAL	**17,521**	**12,458**	**13,941**	**6,765**	**11,694**	**2,957**	**15,910**

1978 Retail Sales of Farm Wheel Tractors by PTO Horsepower and State (in units)

Two-Wheel-Drive Tractors							Four-Wheel-Drive Tractors						
120-129	130-139	140-149	150-159	160-179	180 & over	Total 2-Wheel Drive	Under 170	170-199	200-249	250 & over	Total 4-Wheel Drive	All Farm Wheel Tractors	State
42	345	75	99	45	67	2,807	.....	9	39	14	62	2,869	Alabama
22	106	19	65	25	41	686	1	13	41	14	69	755	Arizona
73	547	248	465	189	396	3,601	7	51	181	65	304	3,905	Arkansas
54	414	55	140	99	107	4,351	8	90	178	57	333	4,684	California
46	241	49	104	20	64	947	10	24	45	10	89	1,036	Colorado
1	14	1	1	.....	.....	200	.....	3	.....	.....	3	203	Connecticut
11	23	4	4	3	4	175	.....	5	7	2	14	189	Delaware
26	155	39	23	21	32	2,339	3	64	21	9	97	2,436	Florida
112	753	132	191	76	166	4,121	1	12	37	7	57	4,178	Georgia
51	222	70	93	21	20	1,158	13	43	68	21	145	1,303	Idaho
276	2,084	563	745	461	567	7,774	40	270	349	154	813	8,587	Illinois
159	1,126	267	385	271	248	5,069	35	146	209	81	471	5,540	Indiana
343	2,922	715	714	383	380	9,187	23	153	240	76	492	9,679	Iowa
175	1,008	150	432	136	299	3,491	29	166	238	55	488	3,979	Kansas
42	282	51	84	46	78	4,747	4	26	53	21	104	4,851	Kentucky
44	317	203	343	115	323	2,600	1	48	151	46	246	2,846	Louisiana
4	10	2	.....	.....	1	244	.....	1	.....	.....	1	245	Maine
21	84	14	13	19	8	791	1	9	9	3	22	813	Maryland
.....	1	.....	1	.....	.....	129	.....	.....	.....	.....	.....	129	Massachusetts
102	502	87	105	54	58	3,162	50	91	78	31	250	3,412	Michigan
258	1,770	348	355	223	167	6,560	32	258	211	78	579	7,139	Minnesota
67	582	161	473	172	329	3,626	2	44	112	57	215	3,841	Mississippi
180	894	223	297	152	204	5,172	14	66	117	54	251	5,423	Missouri
34	152	25	62	26	35	825	62	122	180	63	427	1,252	Montana
169	1,338	358	406	139	181	4,077	8	83	90	24	205	4,282	Nebraska
2	7	5	2	.....	3	79	.....	1	2	.....	3	82	Nevada
.....	5	1	.....	.....	.....	150	.....	.....	.....	.....	.....	150	N. Hampshire
3	40	8	4	7	1	359	2	2	2	.....	6	365	New Jersey
11	81	10	40	5	10	396	2	9	10	3	24	420	New Mexico
40	254	41	39	20	8	2,[illegible]	16	53	24	12	105	2,930	New York
67	333	83	102	44	87	4,533	1	17	26	7	51	4,584	North Carolina
140	889	192	309	145	160	2,543	99	317	366	76	858	3,401	North Dakota
163	942	199	241	135	145	5,744	21	137	155	40	353	6,097	Ohio
91	605	53	191	43	108	2,748	11	96	120	28	255	3,003	Oklahoma
15	126	22	51	16	13	1,336	10	42	29	6	87	1,423	Oregon
46	199	24	29	19	17	2,781	10	13	6	2	31	2,812	Pennsylvania
.....	.....	.....	.....	.....	.....	26	.....	.....	.....	.....	.....	26	Rhode Island
45	205	56	61	34	67	1,871	.....	6	20	7	33	1,904	South Carolina
103	779	135	203	76	61	2,518	39	103	109	23	274	2,792	South Dakota
77	521	120	181	87	169	4,558	1	20	39	31	91	4,649	Tennessee
200	1,763	434	584	247	378	8,754	13	98	222	82	415	9,169	Texas
9	71	14	10	3	3	619	1	7	6	2	16	635	Utah
6	24	4	.....	3	.....	386	4	.....	.....	.....	4	390	Vermont
31	184	27	34	16	31	2,568	1	2	5	2	10	2,578	Virginia
16	117	14	59	7	14	1,577	16	63	87	28	194	1,771	Washington
1	7	1	1	.....	.....	598	.....	.....	.....	.....	.....	598	West Virginia
208	706	138	140	62	74	5,473	13	74	50	23	160	5,633	Wisconsin
11	69	19	16	8	9	357	3	11	6	5	25	382	Wyoming
.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	20	Alaska
.....	1	.....	.....	.....	.....	70	.....	1	3	2	6	76	Hawaii
.....	7	.....	2	.....	1	48	.....	3	.....	.....	3	51	US Government
1	14	.....	4	.....	9	87	.....	.....	3	.....	3	90	Miscellaneous
3,598	**23,841**	**5,459**	**7,903**	**3,673**	**5,143**	**130,863**	**607**	**2,872**	**3,944**	**1,321**	**8,744**	**139,607**	**TOTAL**

DATA: Farm & Industrial Equipment Institute. Figures do not include garden tractors, motor tillers, or contractor's off-highway types. Report includes units marketed by these firms: Allied Farm Equip. (Leyland); Allis-Chalmers; Belarus; J I Case; Deere; Deutz; Ford; International Harvester; Long; Massey-Ferguson; Steiger; Versatile; White; and Woods & Copeland. Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.

RETAIL SALES OF SELECTED FARM EQUIPMENT—Jan.-Dec., 1977 and 1978 (1)

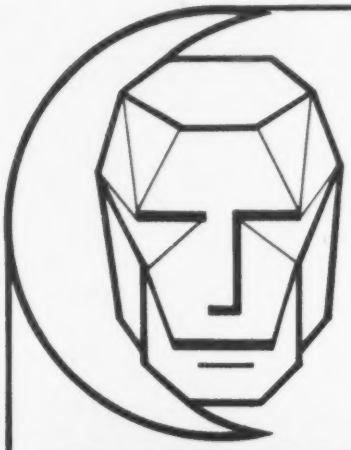
(In Units)

	Combines Self-Propelled		Corn Heads		Hay Balers (2)		Windrowers Self-Propelled Power Units		Windrowers Self-Propelled Total Heads		Grinder-Mixers		Shear-Bar Forage Harvesters (3)	
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978
Alabama	428	539	158	161	454	378	1	1	1	1	227	220	55	64
Arizona	55	47	5	10	58	36	78	77	88	82	3	7	10	10
Arkansas	999	1,045	6	6	614	524	4	2	4	1	86	65	26	21
California	207	253	67	75	275	210	402	302	415	322	9	6	105	84
Colorado	251	249	157	132	386	422	238	257	240	257	42	54	132	162
Connecticut	.....	1	.....	2	69	76	.....	1	.....	1	1	1	54	40
Delaware	58	50	53	40	16	34	.....	3	.....	3	4	7	15	14
Florida	102	165	85	93	219	140	1	.....	1	.....	51	69	45	34
Georgia	564	725	508	575	406	365	1	5	1	5	408	520	109	139
Idaho	349	360	19	15	527	530	353	302	357	311	52	30	57	64
Illinois	3,452	3,600	3,630	3,549	461	414	38	30	38	30	640	748	476	354
Indiana	1,959	2,048	2,111	2,075	555	498	7	17	8	17	488	599	344	281
Iowa	2,912	3,665	3,254	3,866	530	486	283	265	287	272	1,350	1,893	1,117	954
Kansas	1,595	1,605	487	384	584	448	401	359	401	367	224	314	328	283
Kentucky	559	508	468	411	748	669	3	5	3	5	284	302	288	258
Louisiana	622	657	12	8	248	184	.....	1	.....	1	20	15	20	24
Maine	15	8	4	.....	104	94	.....	.....	.....	.....	4	.....	60	36
Maryland	184	171	204	175	159	169	7	12	7	13	56	46	102	88
Massachusetts	1	.....	2	1	55	61	1	1	1	1	1	4	38	32
Michigan	506	562	509	532	526	583	69	72	69	72	244	270	522	466
Minnesota	1,741	2,110	1,511	1,813	1,188	1,111	1,175	859	1,217	888	631	725	1,178	1,096
Mississippi	798	806	30	20	377	262	1	.....	1	.....	65	76	69	71
Missouri	1,459	1,575	909	868	830	751	108	92	108	96	479	583	257	205
Montana	363	456	1	1	361	464	428	569	458	624	90	65	61	68
Nebraska	1,400	1,738	1,365	1,605	329	278	543	457	552	474	364	522	444	428
Nevada	9	7	.....	.....	59	52	54	66	57	71	1	1	9	7
New Hampshire	.....	.....	.....	.....	52	55	2	1	2	1	1	.....	31	29
New Jersey	75	68	38	32	67	78	1	3	1	3	20	12	36	38
New Mexico	44	21	17	9	204	187	107	98	108	97	13	13	18	9
New York	154	171	194	204	726	882	61	83	59	85	170	174	1,465	913
North Carolina	594	591	617	544	458	569	2	2	2	2	204	252	133	143
North Dakota	860	1,182	68	67	187	145	992	1,063	1,042	1,130	136	124	132	144
Ohio	1,625	1,655	1,471	1,450	898	904	20	17	20	17	496	498	430	356
Oklahoma	503	461	55	22	834	743	152	152	151	155	138	141	48	39
Oregon	267	248	8	15	439	389	351	348	357	365	13	25	90	95
Pennsylvania	307	272	352	303	954	1,141	65	88	63	87	426	323	823	689
Rhode Island	.....	.....	.....	.....	7	6	.....	.....	.....	.....	1	.....	3	7
South Carolina	350	355	256	199	165	178	1	.....	1	.....	97	120	30	41
South Dakota	620	712	369	497	303	272	933	821	971	863	247	340	603	415
Tennessee	658	686	294	254	835	804	5	2	5	2	291	281	242	227
Texas	1,102	897	478	276	1,234	1,369	133	98	136	104	212	231	88	60
Utah	44	49	7	13	344	339	146	156	147	159	69	70	78	94
Vermont	.....	.....	.....	2	112	132	2	2	2	2	4	2	186	131
Virginia	206	216	226	181	468	610	11	9	11	9	133	145	231	283
Washington	269	328	49	24	449	367	230	187	244	191	8	29	163	130
West Virginia	5	4	3	5	307	373	.....	.....	.....	.....	22	32	56	56
Wisconsin	494	575	578	669	2,086	2,069	308	377	310	381	464	570	2,301	2,303
Wyoming	49	52	14	13	157	229	154	188	149	196	10	18	31	36
Alaska	1	.....	.....	.....	4	6	1	.....	1	.....	.....	.....	.....	1
Hawaii	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	1
U.S. Government	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous (4)	5	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
TOTAL	**28,821**	**31,494**	**20,651**	**21,196**	**21,429**	**21,086**	**7,873**	**7,450**	**8,096**	**7,763**	**8,999**	**10,544**	**13,146**	**11,523**

Data released Feb. 21, 1979, Farm & Industrial Equipment Institute.

(1) Includes revisions for prior months.
(2) For making bales of under 200 lbs.
(3) Pull-type, mounted, self-propelled.
(4) Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.

Mower Conditioners All Types 1977	1978	Manure Spreaders Conveyor-Type 1977	1978	
255	264	14	20	Alabama
8	4	8	9	Arizona
482	520	96	101	Arkansas
71	54	59	69	California
115	125	32	42	Colorado
67	93	69	86	Connecticut
19	31	72	64	Delaware
176	141	28	28	Florida
293	340	48	36	Georgia
145	135	94	144	Idaho
834	782	947	1,128	Illinois
736	728	682	766	Indiana
1,350	1,501	1,754	2,409	Iowa
744	715	141	219	Kansas
1,090	1,235	252	303	Kentucky
142	118	21	21	Louisiana
104	115	104	116	Maine
157	174	228	242	Maryland
77	86	60	67	Massachusetts
740	949	646	828	Michigan
1,253	1,309	1,481	1,849	Minnesota
206	202	22	28	Mississippi
1,437	1,627	273	384	Missouri
98	137	54	64	Montana
472	462	254	442	Nebraska
10	3	4	7	Nevada
57	83	55	62	New Hampshire
83	97	63	58	New Jersey
32	38	14	3	New Mexico
1,076	1,258	1,619	1,732	New York
360	489	149	171	North Carolina
86	131	150	190	North Dakota
1,114	1,284	1,067	1,028	Ohio
609	705	44	29	Oklahoma
277	251	77	107	Oregon
1,136	1,329	1,407	1,367	Pennsylvania
7	6	.....	3	Rhode Island
151	174	25	32	South Carolina
100	122	287	305	South Dakota
669	866	152	162	Tennessee
1,067	1,367	133	136	Texas
193	191	86	157	Utah
204	248	231	261	Vermont
482	676	202	247	Virginia
198	204	68	122	Washington
159	228	93	88	West Virginia
2,949	3,208	2,565	3,132	Wisconsin
30	151	29	47	Wyoming
1	1	.....	1	Alaska
1	.....	.....	.....	Hawaii
.....	.....	.....	.....	U.S. Government
.....	.....	3	1	Miscellaneous
22,122	**24,957**	**15,962**	**18,913**	**TOTAL**



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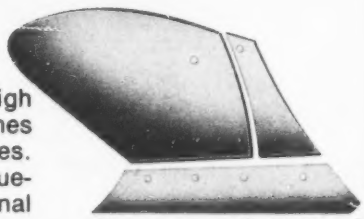

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Motor Vehicles and Specified Machines on U.S. Farms and Average Prices of Wheel Tractors, Designated Years[1]

Year	Tractors (exclusive of steam & garden)[2] Thousands	Motor Trucks Thousands	Grain Combines Thousands	Corn Pickers and Picker Shellers Thousands	Pick-up Balers Thousands	Field Forage Harvesters Thousands	Garden Tractors and Motor Tillers[3] Thousands	Wheel Tractors Wholesale Prices[4] Per Unit Dollars	Horsepower Dollars
1922	372	263	.....	.....	.....	.....	.....	.....	.....
1923	428	316	.....	.....	.....	.....	.....	.....	.....
1924	496	363	.....	.....	.....	.....	.....	.....	.....
1925	549	459	.....	.....	.....	.....	.....	.....	.....
1926	621	559	.....	.....	.....	.....	.....	.....	.....
1927	693	662	.....	.....	.....	.....	.....	.....	.....
1928	782	753	.....	.....	.....	.....	.....	.....	.....
1929	827	840	.....	.....	.....	.....	.....	.....	.....
1930	920	900	61	50	.....	.....	.....	.....	.....
1931	997	920	.....	.....	.....	.....	.....	.....	.....
1932	1,022	910	.....	.....	.....	.....	.....	.....	.....
1933	1,019	865	.....	.....	.....	.....	.....	.....	.....
1934	1,016	875	.....	.....	.....	.....	.....	.....	.....
1935	1,048	890	.....	.....	.....	.....	.....	.....	.....
1936	1,125	923	.....	.....	.....	.....	.....	.....	.....
1937	1,230	990	.....	.....	.....	.....	.....	.....	.....
1938	1,370	1,042	.....	.....	.....	.....	.....	.....	.....
1939	1,445	1,020	.....	.....	.....	.....	.....	.....	.....
1940	1,545	1,047	190	110	.....	.....	.....	.....	.....
1941	1,675	1,095	225	120	.....	.....	.....	.....	.....
1942	1,885	1,160	275	130	[illegible]	.....	.....	.....	.....
1943	2,100	1,280	320	138	[illegible]	.....	.....	$ 579	$21
1944	2,215	1,385	345	146	34	.....	.....	$ 658	$24
1945	2,354	1,490	275	168	42	20	68	$ 665	$25
1946	2,480	1,550	420	203	54	25	80	$ 733	$28
1947	2,613	1,700	465	236	65	30	122	$ 783	$30
1948	2,821	1,900	535	299	90	45	159	$ 890	$33
1949	3,123	2,065	620	372	135	60	192	$ 994	$35
1950	3,399	2,209	714	456	196	81	216	$1,073	$37
1951	3,678	2,310	810	522	240	102	242	$1,234	$42
1952	3,907	2,410	887	588	298	124	268	$1,297	$42
1953	4,100	2,520	930	630	345	148	296	$1,359	$39
1954	4,243	2,610	965	660	395	175	315	$1,513	$39
1955	4,345	2,675	980	688	448	202	332	$1,554	$39
1956	4,480	2,707	1,005	715	505	220	353	$1,682	$41
1957	4,570	2,745	1,015	740	560	240	375	$1,842	$41
1958	4,620	2,775	1,030	755	600	258	400	$2,111	$46
1959	4,673	2,800	1,045	775	645	270	425	$2,189	$48
1960	4,688	2,834	1,042	792	680	291	450	$2,338	$49
1961	4,743	2,850	980	740	685	291	468	$2,578	$50
1962	4,763	2,885	960	730	703	300	485	$2,819	$51
1963	4,778	2,925	940	720	718	307	500	$3,046	$53
1964	4,786	2,970	920	705	734	312	513	$3,443	$53
1965	4,787	3,030	910	690	751	316	699	$3,541	$56
1966	4,783	3,017	888	686	752	316	725	$3,886	$58
1967	4,786	3,009	867	680	748	319	750	$4,257	$62
1968	4,766	3,016	847	673	739	321	770	$4,709	$66
1969	4,712	3,004	820	657	725	314	790	$4,976	$71
1970	4,619	2,978	790	635	708	304	805	$5,560	$76
1971	4,562	2,985	760	629	698	309	815	$6,190	$80
1972	4,509	2,993	725	625	687	315	825	$6,486	$84
1973	4,477	3,006	703	618	680	324	835	$6,953	$85
1974	4,478	3,020	685	618	677	332	850	$7,294	$86
1975	4,463	3,032	666	615	666	337	870	$8,459	$91
1976	4,434	3,043	647	610	642	342	890	$11,220	$112
1977	4,381	3,052	630	605	614	346	905	$12,692	$124
1978	4,350	3,054	615	600	595	345	917	$14,273	$132
1979	4,312	3,057	600	590	575	342	930	$16,617	$150

[1]SOURCE: Reports of the USDA and the Bureau of the Census. After 1959 Alaska and Hawaii are included. On-farm data after 1970, except for 1974, are estimated by I&T.

[2]Consists of Wheel and Crawler Tractors only after 1944. Prior to 1945 some Garden Tractors may have been included but the number was small.

[3]Motor Tillers included after 1964.

[4]Estimated at wholesale level by dividing **Value of Manufacturers' Shipments** by **Units Shipped** and by **Maximum Belt Horsepower**, data are published in "Current Industrial Reports" of the Bureau of the Census.

Principal Machines on Farms—1979

STATE	WHEEL AND CRAWLER TRACTORS						TRACTOR MOLDBOARD PLOWS	
	1954 Census Number	1959 Census Number	1964 Census Number	1969 Census Number	1974 Census Number	Estimated July 1, 1979 Number	Estimated July 1, 1958 Number	Estimated July 1, 1979 Number
Maine	16,800	17,793	16,290	14,252	13,493	12,320	12,400	7,500
New Hampshire	6,635	6,605	6,253	4,953	4,989	4,660	4,600	2,840
Vermont	14,183	16,669	16,333	15,227	14,706	13,660	10,200	8,200
Massachusetts	12,656	12,068	11,575	9,537	9,341	8,315	8,800	6,000
Rhode Island	1,256	1,651	1,687	1,359	1,359	1,225	1,000	860
Connecticut	11,286	11,219	9,963	8,679	7,924	7,300	7,700	4,970
New York	129,741	138,670	136,304	122,645	118,313	110,700	107,000	81,900
New Jersey	25,223	24,726	22,042	19,984	19,324	17,600	21,500	16,000
Pennsylvania	137,476	144,759	144,149	126,810	124,251	114,800	118,600	96,400
Delaware	7,826	8,259	7,992	7,555	7,631	7,320	6,700	6,150
Maryland	35,774	37,291	37,203	34,174	34,705	32,630	30,500	26,780
NORTHEAST	**398,856**	**419,710**	**409,791**	**365,175**	**356,036**	**330,530**	**329,000**	**257,600**
Ohio	198,306	204,681	199,694	194,962	188,580	181,000	161,000	152,400
Indiana	176,016	186,853	181,086	174,055	167,382	161,300	149,000	137,100
Illinois	265,722	290,002	287,480	275,203	272,093	262,000	210,000	186,000
Iowa	297,015	327,863	329,172	318,998	317,052	300,600	235,000	216,400
Missouri	168,428	191,512	198,095	201,513	189,672	178,000	135,000	128,200
CORN BELT	**1,105,487**	**1,200,911**	**1,195,527**	**1,164,731**	**1,134,779**	**1,082,900**	**890,000**	**820,100**
Michigan	166,791	169,782	169,920	152,741	143,569	133,100	139,000	105,100
Wisconsin	213,903	234,387	247,427	229,752	237,457	217,600	171,000	152,300
Minnesota	249,332	275,833	284,887	258,614	260,535	241,400	210,000	176,200
LAKE STATES	**630,026**	**680,002**	**702,234**	**641,107**	**641,561**	**592,100**	**520,000**	**433,600**
North Dakota	112,558	121,039	122,056	118,069	123,072	116,800	84,000	74,700
South Dakota	109,123	115,639	120,100	111,532	114,546	104,500	84,000	72,100
Nebraska	159,977	175,254	180,423	166,098	170,423	159,300	108,000	90,800
Kansas	168,506	173,651	174,185	163,180	161,276	150,900	123,000	96,600
GREAT PLAINS	**550,164**	**585,764**	**596,764**	**558,879**	**569,317**	**531,500**	**399,000**	**334,200**
West Virginia	18,162	21,995	23,926	23,842	23,265	21,870	15,400	14,900
Kentucky	83,842	103,415	118,404	137,105	129,069	128,700	71,000	68,900
Tennessee	84,869	97,800	108,319	122,528	110,941	111,900	43,000	48,800
Virginia	64,750	75,143	78,989	79,347	76,121	74,800	52,000	47,100
North Carolina	120,5[illegible]	140,639	149,850	150,825	130,140	132,000	57,600	54,100
APPALACHIAN	**372,218**	**438,992**	**479,488**	**513,647**	**469,536**	**469,270**	**239,000**	**233,800**
South Carolina	44,631	48,637	50,931	50,115	45,321	47,140	9,200	11,800
Georgia	85,192	89,392	89,049	84,366	77,067	83,500	23,500	24,200
Florida	31,858	35,820	41,295	42,958	44,192	47,260	12,300	15,200
Alabama	62,526	67,559	71,925	75,069	68,521	70,500	20,500	23,200
SOUTHEAST	**224,207**	**241,408**	**253,200**	**252,508**	**235,101**	**248,400**	**65,500**	**74,400**
Mississippi	79,575	84,425	90,347	88,677	76,808	79,700	29,700	28,200
Louisiana	49,985	53,229	60,618	63,194	55,933	58,700	15,400	17,100
Arkansas	79,799	83,852	90,993	86,977	78,083	82,000	41,900	40,600
DELTA STATES	**209,359**	**221,506**	**241,958**	**238,848**	**210,824**	**220,400**	**87,000**	**85,900**
Oklahoma	101,885	102,323	101,605	102,397	91,661	88,700	74,000	64,700
Texas	268,613	268,233	269,519	282,088	251,687	248,500	74,500	69,100
SOUTHERN PLAINS	**370,498**	**370,556**	**371,124**	**384,485**	**343,348**	**337,200**	**148,500**	**133,800**
Montana	54,163	59,510	61,832	58,729	58,457	54,000	30,500	27,000
Idaho	49,753	56,961	58,607	54,091	55,419	52,000	40,000	35,400
Wyoming	18,700	20,737	21,596	20,925	20,801	18,830	15,400	14,700
Colorado	59,647	64,051	63,906	59,112	58,091	53,000	34,000	29,200
New Mexico	16,817	17,146	17,919	15,998	17,021	16,000	11,300	9,100
Arizona	13,506	13,443	13,747	12,136	13,812	14,270	4,200	4,000
Utah	19,445	21,803	22,256	20,128	21,110	20,050	17,500	15,800
Nevada	4,356	5,297	5,557	5,318	5,515	4,900	3,100	2,600
MOUNTAIN STATES	**236,387**	**258,948**	**265,420**	**246,437**	**250,226**	**233,050**	**156,000**	**137,800**
Washington	57,048	63,114	65,813	58,600	59,542	56,400	42,000	38,900
Oregon	54,206	56,732	58,741	51,223	52,651	49,250	44,000	40,400
California	136,778	147,390	142,812	138,914	140,393	135,000	70,000	67,500
PACIFIC	**248,032**	**267,236**	**267,366**	**248,737**	**252,586**	**240,650**	**156,000**	**146,800**
TOTAL	**4,345,234**	**4,884,852**	**4,782,872**	**4,614,554**	**4,463,314**	**4,286,000**	**2,990,000**	**2,658,000**

Principal Machines on Farms—1979

STATE	COMBINES[1] 1959 Census Number	1964 Census Number	1969 Census Number	1974 Census Number	Estimated July 1, 1979 Number	CORN HEADS FOR COMBINES[2] 1969 Census Number	1974 Census Number	Estimated July 1, 1979 Number
Maine	1,077	875	218	242	245	120	141	145
New Hampshire	39	27	8	5	5	65	55	50
Vermont	431	344	113	87	75	175	238	255
Massachusetts	98	70	34	35	30	84	103	105
Rhode Island	24	20	5	7	5	21	10	10
Connecticut	112	77	40	15	10	92	85	75
New York	18,702	16,536	4,902	5,114	4,880	1,706	2,344	2,900
New Jersey	2,239	1,726	634	766	840	269	324	400
Pennsylvania	26,431	23,939	6,777	7,297	7,070	1,924	2,636	3,400
Delaware	1,903	1,780	979	1,127	1,130	566	681	780
Maryland	5,934	5,237	2,604	2,740	2,840	1,555	1,954	2,340
NORTHEAST	**56,990**	**50,631**	**16,314**	**17,435**	**17,130**	**6,577**	**8,571**	**10,460**
Ohio	57,060	50,291	20,805	26,009	26,850	11,892	17,515	21,900
Indiana	54,238	46,395	23,871	29,485	31,000	17,920	24,616	30,200
Illinois	93,366	80,857	48,116	55,085	56,200	37,649	46,362	54,100
Iowa	99,709	86,178	28,221	42,117	45,500	22,302	37,864	49,000
Missouri	51,993	44,535	24,208	26,253	26,600	16,112	18,278	20,000
CORN BELT	**356,366**	**308,256**	**145,221**	**178,949**	**186,150**	**105,875**	**144,635**	**175,200**
Michigan	45,764	41,360	13,053	14,649	14,200	4,306	7,098	8,950
Wisconsin	45,032	45,516	10,859	13,392	12,900	3,566	5,147	6,700
Minnesota	73,278	71,748	27,189	35,033	35,350	12,102	18,780	23,500
LAKE STATES	**164,074**	**158,624**	**51,101**	**63,074**	**62,450**	**19,974**	**31,025**	**39,150**
North Dakota	48,732	41,782	26,952	27,273	26,600	753	864	990
South Dakota	33,206	28,289	11,926	13,941	13,800	3,483	5,386	6,700
Nebraska	53,343	43,205	25,730	29,224	29,650	13,370	18,578	22,600
Kansas	72,115	59,813	41,601	41,871	41,250	6,533	8,038	9,100
GREAT PLAINS	**207,396**	**173,089**	**107,209**	**112,309**	**111,300**	**24,139**	**32,866**	**39,390**
West Virginia	951	1,020	245	307	280	147	199	215
Kentucky	10,617	9,737	4,565	6,329	6,700	3,196	4,390	5,550
Tennessee	13,003	11,537	5,773	6,843	7,550	2,458	2,734	3,200
Virginia	10,133	9,281	3,769	4,309	4,330	2,243	2,972	3,520
North Carolina	17,335	14,847	7,982	8,828	9,300	5,279	6,696	7,970
APPALACHIAN	**52,039**	**46,422**	**22,334**	**26,616**	**28,160**	**13,323**	**16,991**	**20,455**
South Carolina	8,595	7,085	4,483	4,706	5,030	1,803	2,285	2,830
Georgia	10,340	9,177	5,408	6,255	7,200	4,036	4,836	5,900
Florida	1,055	1,230	1,010	1,182	1,360	584	773	1,010
Alabama	5,116	4,806	3,423	3,988	4,480	1,635	1,858	2,160
SOUTHEAST	**25,106**	**22,298**	**14,324**	**16,131**	**18,070**	**8,058**	**9,752**	**11,900**
Mississippi	7,369	6,099	6,977	6,893	7,960	441	310	290
Louisiana	5,078	5,145	6,414	7,034	7,640	357	231	210
Arkansas	13,750	13,086	12,657	11,484	12,600	294	725	680
DELTA STATES	**26,197**	**24,330**	**26,048**	**25,411**	**28,200**	**1,092**	**1,266**	**1,180**
Oklahoma	27,038	21,668	14,909	14,797	14,500	457	511	570
Texas	40,723	31,355	21,223	19,394	20,000	1,743	1,858	2,430
SOUTHERN PLAINS	**67,761**	**53,023**	**36,132**	**34,191**	**34,500**	**2,200**	**2,369**	**3,000**
Montana	18,063	16,011	11,667	11,392	11,000	121	107	100
Idaho	12,703	11,330	7,639	8,113	8,000	202	252	285
Wyoming	3,757	2,962	1,523	1,690	1,620	112	149	185
Colorado	13,799	11,062	6,937	7,338	7,070	1,032	1,632	2,100
New Mexico	2,358	1,898	1,041	1,229	1,160	52	117	170
Arizona	824	559	412	530	640	25	23	25
Utah	3,136	2,421	1,442	1,442	1,370	134	196	225
Nevada	402	277	201	253	240	9	21	20
MOUNTAIN STATES	**55,042**	**46,520**	**30,882**	**31,987**	**31,100**	**1,687**	**2,497**	**3,110**
Washington	10,800	9,706	6,891	7,330	7,320	307	269	290
Oregon	10,587	8,372	5,107	5,266	5,200	167	106	85
California	9,169	8,366	5,619	5,373	5,420	633	696	780
PACIFIC	**30,556**	**26,444**	**17,617**	**17,969**	**17,940**	**1,107**	**1,071**	**1,155**
TOTAL	**1,041,527**	**909,637**	**467,182**	**524,072**	**535,000**	**184,032**	**251,043**	**305,000**

[1]The Census in 1959 and 1964 included self-propelled and pull types. The Census in 1969 and 1974 and the estimated number for July 1, 1979 cover only the number of self-propelled combines.

[2]The Census in 1969 included only corn heads on class 1-5 farms, those with $2,500 or more of income. The Census in 1974 and the estimated number for July 1, 1979 cover all farms.

Principal Machines on Farms—1979

STATE	PICK-UP BALERS					FIELD FORAGE HARVESTERS[1]			
	1959 Census Number	1964 Census Number	1969 Census Number	1974 Census Number	Estimated July 1, 1979 Number	1964 Census Number	1969 Census Number	1974 Census Number	Estimated July 1, 1979 Number
Maine	3,137	3,339	2,446	2,255	2,050	998	712	914	1,370
New Hampshire	1,673	1,681	1,266	1,197	1,075	747	385	612	930
Vermont	5,210	5,796	4,171	3,975	3,370	2,358	1,542	2,328	3,200
Massachusetts	2,379	2,343	1,774	1,600	1,380	1,412	744	923	1,220
Rhode Island	247	250	171	172	145	233	88	122	150
Connecticut	2,110	1,971	1,604	1,313	1,230	1,561	788	777	890
New York	36,724	38,107	31,074	27,495	23,000	20,710	13,815	17,363	23,300
New Jersey	3,258	3,073	2,357	2,066	1,750	2,181	1,171	1,127	1,280
Pennsylvania	38,491	41,873	35,571	32,195	27,000	20,794	12,240	15,485	23,000
Delaware	856	664	609	628	550	475	245	422	640
Maryland	6,599	6,845	5,750	5,159	4,300	3,961	2,177	2,603	3,800
NORTHEAST	**100,684**	**105,942**	**86,793**	**78,055**	**65,850**	**55,430**	**33,907**	**42,676**	**59,780**
Ohio	41,809	43,607	40,101	36,137	29,320	11,759	7,788	9,757	14,520
Indiana	25,835	25,459	23,414	21,705	17,650	7,523	5,344	6,121	7,800
Illinois	38,792	38,163	33,291	29,822	23,050	16,295	10,130	11,333	14,770
Iowa	58,558	60,111	55,456	47,461	36,700	20,937	14,245	17,179	24,280
Missouri	31,697	36,265	38,929	38,487	30,850	9,315	6,884	7,430	8,270
CORN BELT	**196,691**	**203,605**	**191,191**	**173,612**	**137,570**	**65,829**	**44,391**	**51,820**	**69,640**
Michigan	28,414	31,502	26,915	23,897	19,500	15,077	8,986	11,682	17,080
Wisconsin	53,836	63,921	56,939	54,962	46,200	48,149	27,199	38,341	56,500
Minnesota	45,583	55,896	51,600	46,689	37,600	26,024	17,761	20,825	27,980
LAKE STATES	**127,833**	**151,319**	**135,454**	**125,548**	**103,300**	**89,250**	**53,946**	**70,848**	**101,560**
North Dakota	13,882	15,823	15,623	14,831	11,400	9,555	6,614	5,911	5,970
South Dakota	13,117	14,441	14,657	13,835	10,800	10,810	9,755	11,254	17,270
Nebraska	18,684	19,907	18,988	17,309	13,750	13,268	11,232	12,632	14,100
Kansas	24,595	28,086	27,464	26,846	21,800	17,035	11,712	10,651	11,550
GREAT PLAINS	**70,278**	**78,257**	**76,732**	**72,821**	**57,750**	**50,668**	**39,313**	**40,448**	**48,890**
West Virginia	5,459	7,362	8,013	7,444	6,650	1,155	1,143	1,478	1,810
Kentucky	18,397	21,476	24,121	23,536	19,600	3,157	3,621	4,400	5,310
Tennessee	13,103	15,234	17,686	17,090	15,400	3,002	2,953	3,602	4,500
Virginia	14,419	16,105	16,035	15,285	12,900	4,450	4,181	4,675	5,450
North Carolina	10,087	10,322	10,053	10,115	8,600	3,365	2,695	3,841	4,600
APPALACHIAN	**61,465**	**70,499**	**75,908**	**73,470**	**63,150**	**15,129**	**14,593**	**17,996**	**21,670**
South Carolina	4,325	4,468	3,857	3,719	3,300	1,139	887	1,075	1,310
Georgia	5,875	6,917	7,118	6,678	6,300	1,696	1,455	1,722	2,300
Florida	1,032	1,419	1,692	1,910	2,000	543	447	629	710
Alabama	4,361	6,231	7,227	7,662	7,250	1,233	1,250	1,513	1,900
SOUTHEAST	**15,593**	**19,035**	**19,894**	**19,969**	**18,850**	**4,611**	**4,039**	**4,939**	**6,220**
Mississippi	6,065	6,618	7,045	7,431	6,640	1,697	1,531	2,130	2,630
Louisiana	3,987	5,064	4,831	4,594	4,150	775	763	872	1,210
Arkansas	6,206	6,456	7,500	8,040	7,900	1,181	1,014	1,047	1,200
DELTA STATES	**16,258**	**18,138**	**19,376**	**20,065**	**18,690**	**3,653**	**3,308**	**4,049**	**5,040**
Oklahoma	11,353	12,965	14,246	14,432	13,650	2,820	1,872	1,740	2,000
Texas	13,591	15,737	18,208	18,534	19,000	4,643	3,556	3,215	3,900
SOUTHERN PLAINS	**24,944**	**28,702**	**32,454**	**32,966**	**32,650**	**7,463**	**5,428**	**4,955**	**5,900**
Montana	9,211	11,458	11,059	10,613	9,200	1,736	1,695	1,512	1,730
Idaho	11,323	13,072	12,057	12,048	10,720	2,696	1,907	2,048	2,410
Wyoming	3,496	4,259	4,357	4,383	3,980	1,086	924	995	1,190
Colorado	3,095	9,600	9,504	9,505	8,400	5,252	3,744	3,755	4,370
New Mexico	2,150	2,340	2,532	2,833	2,740	560	490	591	750
Arizona	995	1,001	860	1,018	900	556	281	314	480
Utah	5,891	6,389	5,887	5,957	5,530	1,989	1,378	1,560	1,920
Nevada	1,116	1,264	1,177	1,299	1,120	291	189	233	320
MOUNTAIN STATES	**42,277**	**49,383**	**47,433**	**47,656**	**42,590**	**14,166**	**10,608**	**11,008**	**13,170**
Washington	8,085	9,759	8,658	8,215	7,480	3,734	1,837	2,234	3,430
Oregon	6,482	8,007	7,218	7,195	6,650	2,419	1,532	1,496	2,190
California	9,164	8,389	6,829	6,435	5,470	3,189	1,666	2,006	3,510
PACIFIC	**23,731**	**26,155**	**22,705**	**21,845**	**19,600**	**9,342**	**5,035**	**5,736**	**9,130**
TOTAL	**679,754**	**751,035**	**707,940**	**666,007**	**560,000**	**315,541**	**214,588**	**254,475**	**341,000**

[1]The Census in 1964 and the estimated number for July 1, 1979 include shear-bar and flail types. The Census in 1969 and 1974 covered only the number of shear-bar harvesters.

Principal Machines on Farms—1979

STATE	POWER TRACTOR MOWERS (Cutter bar type only) Estimated July 1, 1958 Number	Estimated July 1, 1979 Number	SIDE DELIVERY RAKES Estimated July 1, 1958 Number	Estimated July 1, 1979 Number	MOWER CONDITIONERS[1] 1974 Census Number	Estimated July 1, 1979 Number
Maine	9,000	6,770	10,000	5,560	1,378	1,850
New Hampshire	4,400	3,090	5,000	2,370	605	850
Vermont	10,000	9,000	10,300	6,940	2,776	3,750
Massachusetts	5,800	4,050	6,000	3,320	1,048	1,370
Rhode Island	550	350	500	300	102	125
Connecticut	4,500	3,530	4,000	2,350	786	1,090
New York	55,000	56,100	61,000	43,900	18,701	24,570
New Jersey	7,000	4,540	8,000	3,780	1,636	1,970
Pennsylvania	60,000	62,300	67,000	46,400	20,428	26,200
Delaware	1,750	1,100	2,200	970	525	640
Maryland	14,000	11,470	13,000	8,500	3,614	4,350
NORTHEAST	**172,000**	**162,300**	**187,000**	**124,390**	**51,599**	**66,765**
Ohio	70,000	66,200	86,000	53,900	20,268	25,250
Indiana	64,000	52,000	71,000	39,600	12,503	15,500
Illinois	106,000	72,300	86,000	51,500	18,793	22,100
Iowa	115,000	107,500	127,000	86,400	19,636	25,370
Missouri	80,000	86,600	50,000	50,600	17,228	23,130
CORN BELT	**435,000**	**384,600**	**420,000**	**282,000**	**88,428**	**111,350**
Michigan	48,000	49,750	85,000	41,600	15,924	19,450
Wisconsin	93,000	106,600	115,000	86,700	36,232	48,300
Minnesota	96,000	99,250	108,000	84,000	22,979	28,300
LAKE STATES	**237,000**	**255,600**	**308,000**	**212,300**	**75,135**	**96,050**
North Dakota	42,000	41,500	26,000	22,200	5,971	6,450
South Dakota	44,000	48,100	31,000	22,300	4,445	4,800
Nebraska	61,000	58,100	41,000	34,400	9,225	11,280
Kansas	62,000	56,600	42,000	35,600	9,247	12,340
GREAT PLAINS	**209,000**	**204,300**	**140,000**	**114,500**	**28,888**	**34,870**
West Virginia	14,000	19,100	8,000	9,400	3,484	4,250
Kentucky	48,000	51,250	28,000	30,400	14,718	18,820
Tennessee	47,000	55,050	25,500	24,000	12,037	15,000
Virginia	28,000	33,850	25,500	23,600	8,714	11,070
North Carolina	27,000	33,150	15,000	15,500	6,824	8,380
APPALACHIAN	**164,000**	**192,400**	**102,000**	**102,900**	**45,777**	**57,520**
South Carolina	12,500	10,660	7,500	5,920	2,471	3,090
Georgia	23,000	19,800	12,000	10,500	6,383	7,560
Florida	7,500	4,000	2,200	1,910	4,000	4,570
Alabama	19,000	18,100	7,300	7,530	5,367	6,500
SOUTHEAST	**62,000**	**52,560**	**29,000**	**25,880**	**18,221**	**21,720**
Mississippi	21,000	23,140	5,000	9,700	5,282	6,360
Louisiana	12,000	11,740	6,000	6,150	4,421	5,000
Arkansas	24,000	22,300	12,000	10,400	5,521	7,460
DELTA STATES	**57,000**	**57,180**	**23,000**	**26,250**	**15,224**	**18,820**
Oklahoma	37,000	34,000	22,000	19,600	7,703	10,350
Texas	48,000	49,700	21,000	22,600	19,487	24,800
SOUTHERN PLAINS	**85,000**	**83,700**	**43,000**	**42,200**	**27,190**	**35,150**
Montana	23,000	22,800	15,000	13,750	3,205	3,660
Idaho	27,000	22,380	23,000	16,400	3,367	3,890
Wyoming	10,500	6,410	6,000	5,150	1,179	1,450
Colorado	24,000	16,880	25,000	14,600	2,712	3,250
New Mexico	8,000	4,970	8,000	4,200	1,005	1,125
Arizona	4,500	2,120	3,700	1,400	427	465
Utah	11,700	12,000	12,000	9,300	2,257	3,000
Nevada	2,300	1,670	2,300	1,500	384	415
MOUNTAIN STATES	**111,000**	**89,230**	**95,000**	**66,300**	**14,536**	**17,255**
Washington	27,000	22,670	16,000	13,400	4,218	4,980
Oregon	23,000	21,180	15,000	11,900	3,634	4,670
California	33,000	25,280	22,000	14,000	3,590	3,850
PACIFIC	**83,000**	**69,130**	**53,000**	**39,300**	**11,442**	**13,500**
TOTAL	**1,615,000**	**1,551,000**	**1,400,000**	**1,036,000**	**376,440**	**473,000**

[1]Does not include windrowers with conditioning rolls.

Principal Machines on Farms—1979

STATE	POWER ELEVATORS Estimated Jan. 1, 1951 Number	POWER ELEVATORS Estimated Jan. 1, 1958 Number	POWER ELEVATORS Estimated July 1, 1979 Number	Manure Spreaders Estimated July 1, 1979 Number	Corn and Cotton Planters Estimated July 1, 1979 Number	Grain Drills Estimated July 1, 1979 Number
Maine			4,700	3,200	340	810
New Hampshire			2,200	1,980	290	60
Vermont	1,200	12,000	7,050	6,200	1,580	320
Massachusetts			3,180	2,340	890	115
Rhode Island			450	290	110	30
Connecticut			3,700	2,350	1,000	80
New York	7,200	35,000	61,500	39,700	19,400	25,600
New Jersey	2,000	5,500	5,450	2,490	2,360	2,325
Pennsylvania	9,600	38,000	65,300	42,000	32,600	38,600
Delaware	500	2,000	3,480	1,750	2,080	1,930
Maryland	2,500	7,500	14,300	8,550	8,340	8,600
NORTHEAST	**23,000**	**100,000**	**171,310**	**110,850**	**68,990**	**78,470**
Ohio	27,000	68,000	112,000	58,100	62,500	60,900
Indiana	30,000	66,000	111,200	52,200	64,000	49,200
Illinois	61,000	110,000	170,000	76,500	93,000	61,900
Iowa	80,000	122,000	179,000	103,300	104,300	57,700
Missouri	15,000	41,000	79,500	59,500	49,300	49,900
CORN BELT	**213,000**	**407,000**	**651,700**	**349,600**	**373,100**	**279,600**
Michigan	14,000	45,000	79,500	37,850	37,700	49,000
Wisconsin	15,000	48,000	125,000	85,300	66,200	61,700
Minnesota	46,000	90,000	140,500	79,100	79,800	71,700
LAKE STATES	**75,000**	**183,000**	**345,000**	**202,250**	**183,700**	**182,400**
North Dakota	28,000	45,000	68,000	21,770	15,100	56,800
South Dakota	24,000	40,000	60,800	30,320	30,500	32,200
Nebraska	36,000	60,000	93,600	46,800	44,900	41,100
Kansas	25,000	55,000	100,000	39,400	22,100	67,600
GREAT PLAINS	**113,000**	**200,000**	**322,400**	**138,290**	**112,600**	**197,700**
West Virginia	500	3,000	6,000	8,770	5,170	3,500
Kentucky	2,500	10,000	23,100	29,200	38,300	10,900
Tennessee	1,000	6,500	14,200	21,450	51,600	13,700
Virginia	2,000	11,000	18,000	22,820	26,000	16,700
North Carolina	1,000	7,500	19,300	22,200	73,100	22,200
APPALACHIAN	**7,000**	**38,000**	**80,600**	**104,440**	**194,170**	**67,000**
South Carolina	300	2,000	4,400	4,180	30,700	11,500
Georgia	900	6,000	13,200	7,000	38,800	9,800
Florida	300	1,500	3,480	1,190	6,050	1,700
Alabama	500	4,500	10,820	4,750	42,200	6,930
SOUTHEAST	**2,000**	**14,000**	**31,900**	**17,120**	**117,750**	**29,930**
Mississippi	700	4,500	7,400	5,370	52,800	8,150
Louisiana	400	1,000	2,430	3,050	19,900	7,350
Arkansas	900	4,500	9,050	7,400	21,600	13,100
DELTA STATES	**2,000**	**10,000**	**18,880**	**15,820**	**94,300**	**28,600**
Oklahoma	6,000	12,000	24,100	9,700	9,500	31,600
Texas	9,000	23,000	38,400	18,080	55,700	49,200
SOUTHERN PLAINS	**15,000**	**35,000**	**62,500**	**27,780**	**65,200**	**80,800**
Montana	7,500	17,500	26,800	11,230	1,110	21,300
Idaho	3,100	13,300	23,400	14,100	2,680	15,800
Wyoming	700	2,500	4,800	4,900	980	4,100
Colorado	7,000	13,000	23,900	14,550	6,200	15,700
New Mexico	500	1,500	2,500	2,400	3,180	1,930
Arizona	100	700	1,710	1,000	1,950	1,420
Utah	700	5,000	9,650	7,700	1,730	5,430
Nevada	400	500	910	1,140	60	320
MOUNTAIN STATES	**20,000**	**54,000**	**93,670**	**57,020**	**17,890**	**66,000**
Washington	2,000	8,000	20,800	15,050	1,850	12,500
Oregon	3,000	8,000	16,800	13,160	1,150	11,850
California	4,000	13,000	22,440	15,620	9,300	9,150
PACIFIC	**9,000**	**29,000**	**60,040**	**43,830**	**12,300**	**33,500**
TOTAL	**479,000**	**1,070,000**	**1,838,000**	**1,067,000**	**1,240,000**	**1,044,000**

Principal Machines on Farms—1979

STATE	MOTOR TRUCKS					Internal Combustion Engines[2]	Chain Saws
	1954 Adj. Cen. 1,000's[1]	1959 Census 1,000's	1964 Census 1,000's	1969 Census 1,000's	1974 Census 1,000's	Estimated July 1, 1979 1,000's	Estimated July 1, 1979 Number	Estimated July 1, 1979 Number
Maine	18.1	17.3	14.8	12.1	11.3	10.8	1,450	7,400
New Hampshire	8.3	6.8	5.6	4.0	3.7	3.5	1,350	2,500
Vermont	11.1	10.0	8.1	6.1	6.2	6.2	1,900	6,250
Massachusetts	14.3	12.3	10.6	8.4	7.7	7.2	1,900	4,500
Rhode Island	1.9	1.9	1.8	1.2	1.2	1.2	210	630
Connecticut	13.2	11.0	9.9	7.4	6.2	5.4	1,740	3,800
New York	70.5	66.5	62.9	53.6	53.6	53.0	23,000	49,500
New Jersey	24.4	20.9	17.3	14.3	12.9	12.2	2,650	5,900
Pennsylvania	71.0	71.4	69.5	57.3	55.5	54.5	23,500	43,300
Delaware	5.2	5.3	5.2	5.1	5.7	6.0	1,000	2,500
Maryland	22.0	21.2	21.3	19.5	21.3	22.0	5,000	12,100
NORTHEAST	**260.0**	**244.6**	**227.0**	**189.0**	**185.3**	**182.0**	**63,700**	**138,380**
Ohio	77.0	81.5	91.4	93.7	97.8	100.5	21,700	60,500
Indiana	77.4	88.2	99.0	100.1	103.9	106.2	22,500	65,500
Illinois	99.9	113.7	120.9	129.3	139.9	145.2	33,000	71,000
Iowa	84.3	99.8	106.7	121.4	137.1	146.0	34,700	56,300
Missouri	95.8	109.7	123.0	132.5	134.0	134.8	35,500	94,200
CORN BELT	**434.4**	**492.9**	**541.0**	**577.0**	**612.7**	**632.7**	**147,400**	**347,500**
Michigan	70.5	75.7	80.5	74.6	73.6	72.8	19,700	45,500
Wisconsin	87.0	90.6	97.0	89.0	92 3	93.2	37,000	92,300
Minnesota	90.0	103.4	112.5	116.9	130.1	137.2	52,500	65,700
LAKE STATES	**247.5**	**269.7**	**290.0**	**280.5**	**296.0**	**303.2**	**109,200**	**203,500**
North Dakota	66.8	75.5	81.6	91.2	101.3	105.2	38,500	4,300
South Dakota	47.7	52.3	56.5	57.8	65.1	68.3	25,800	3,300
Nebraska	72.0	83.4	93.1	96.4	108.5	115.5	34,000	14,000
Kansas	112.1	122.3	134.0	141.3	150.9	157.2	45,000	23,000
GREAT PLAINS	**298.6**	**333.5**	**365.2**	**386.7**	**425.8**	**446.2**	**143,300**	**44,600**
West Virginia	26.0	24.7	24.1	19.5	16.9	15.4	5,350	21,500
Kentucky	66.7	74.9	90.5	97.1	95.8	95.2	17,800	44,200
Tennessee	71.6	76.8	86.3	92.8	88.1	85.3	13,500	58,500
Virginia	57.5	58.0	59.2	55.9	55.5	54.8	13,100	48,700
North Carolina	84.5	91.1	101.1	99.3	93.5	90.0	17,000	87,300
APPALACHIAN	**306.3**	**325.5**	**361.2**	**364.6**	**349.8**	**340.7**	**66,750**	**260,200**
South Carolina	39.2	39.1	39.0	35.3	33.7	32.5	6,650	24,500
Georgia	76.2	72.8	76.6	70.9	69.2	68.0	13,800	33,850
Florida	36.6	36.4	40.6	37.8	40.1	41.6	13,300	7,700
Alabama	63.7	63.4	69.5	67.4	64.4	62.7	11,500	31,850
SOUTHEAST	**215.7**	**211.7**	**225.7**	**211.4**	**207.4**	**204.8**	**45,250**	**97,900**
Mississippi	76.2	71.5	75.1	66.4	60.5	57.5	11,000	37,700
Louisiana	47.3	47.2	51.3	44.7	41.6	39.8	12,000	20,500
Arkansas	76.2	73.2	80.6	71.4	69.5	68.3	14,700	31,600
DELTA STATES	**199.7**	**191.9**	**207.0**	**182.5**	**171.6**	**165.6**	**37,700**	**89,800**
Oklahoma	85.7	92.7	105.1	106.8	101.6	98.5	22,200	10,150
Texas	187.8	197.8	211.0	227.6	208.1	196.0	62,500	19,750
SOUTHERN PLAINS	**273.5**	**290.5**	**316.1**	**334.4**	**309.7**	**294.5**	**84,700**	**29,900**
Montana	48.5	52.8	58.2	58.3	61.9	63.7	20,200	12,200
Idaho	38.7	44.0	48.3	47.1	51.4	53.5	16,300	13,550
Wyoming	15.0	16.2	17.7	18.4	19.2	19.7	6,400	3,280
Colorado	48.5	51.7	55.9	55.5	56.9	57.8	20,600	6,150
New Mexico	21.3	20.3	23.4	18.8	20.0	20.6	7,800	3,050
Arizona	13.5	16.8	17.2	12.1	14.4	16.1	5,100	520
Utah	18.0	18.8	20.3	18.3	19.4	20.3	6,700	2,450
Nevada	3.9	4.5	4.5	5.0	5.4	5.6	1,500	620
MOUNTAIN STATES	**207.4**	**225.1**	**245.5**	**233.5**	**248.6**	**257.3**	**84,600**	**41,820**
Washington	55.4	60.2	64.2	56.7	57.1	57.3	17,400	23,200
Oregon	47.7	48.9	53.6	46.2	49.6	51.6	22,000	26,500
California	128.8	131.0	126.1	115.7	118.8	121.1	64,000	32,700
PACIFIC	**231.9**	**240.1**	**243.9**	**218.6**	**225.5**	**230.0**	**103,400**	**82,400**
TOTAL	**2,675.0**	**2,825.5**	**3,022.6**	**2,978.2**	**3,032.4**	**3,057.0**	**886,000**	**1,336,000**

[1]Census numbers have been adjusted to bring them more in line with 1959 and later data based on the new definition of a farm.

[2]Includes engines used for stationary work such as irrigation, auxiliary engines on combines, balers, etc., and a small number of power units not elsewhere classified.

NOTE

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